ORDER

3400.3F

AIRWAY FACILITIES MAINTENANCE PERSONNEL CERTIFICATION PROGRAM

August 6, 1992

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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Initiated By: ASM-250

RECORD OF CHANGES

DIRECTIVE NO. 3400.3F

CHANGE TO BASIC	SUPPLEMENT			OPTIONAL	CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL

FAA Form 1320-5 (6-80) USE PREVIOUS EDITION

FOREWORD

This order ensures that technical personnel assigned to perform maintenance on facilities used in the National Airspace System (NAS) are technically proficient in performing assigned duties. The requirement for technical proficiency is the same for both the Federal Aviation Administration (FAA) and contract personnel. Technical proficiency does not entitle a contract technician to certify FAA equipment operating in the NAS, pursuant to the latest version of Order 6000.15, General Maintenance Handbook for Airway Facilities. The on-going certification of navigational aids (navaid) in the NAS requires that experienced and certified FAA technicians exercise discretionary judgement. The Office of Chief Counsel has issued a legal opinion stating that a discretionary function performed by Federal agency employees is an inherently governmental function which cannot be contracted to the private sector. Therefore, the FAA cannot contract out nor delegate to a contractor the performance of its on-going certification of navaids. The FAA may contract for the performance of nondiscretionary functions and activities.

Through the Airway Facilities Maintenance Personnel Certification Program, the FAA recognizes the level of professional attainment of individuals responsible for the operation and performance of air traffic control facilities used by the aviation community. The personnel certification process is a confirmation that the individual possesses the necessary knowledge and skills to assume full responsibility for attesting to the operational status of a particular service/system/subsystem/equipment. This level of achievement is demonstrated by acquisition of certification authority and responsibility as defined herein. This order prescribes the procedures and assigns responsibility for administration of the program that assures the technical competency of personnel who are engaged in the certification of systems and facilities used in the NAS.

for Arnold Aquilano
Associate Administrator for
Airway Facilities

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CHAPTER 1. GENERAL

1. PURPOSE. This order specifies the procedures necessary to implement and sustain a uniform national personnel certification program for Federal Aviation Administration (FAA) personnel and a verification program for FAA contract personnel and personnel responsible for non-Federal facilities.

2. DISTRIBUTION. This order is distributed to division level in all Washington headquarters offices except the Associate Administrator for Airway Facilities, the Systems Maintenance Service, and the NAS Transition and Implementation Service; to branch level within the Associate Administrator for Airway Facilities, the Systems Maintenance Service, and the NAS Transition and Implementation Service in Washington headquarters; to branch level within the regional Airway Facilities, Resource Management, Financial and Information Resources, and Management Systems divisions; to branch level at the FAA Logistics Center; to section level at the FAA Academy; to division level within the Engineering, Test, and Evaluation Service at the FAA Technical Center; and to all Airway Facilities field offices with a maximum distribution.

3. CANCELLATION. Order 3400.3E, Airway Facilities Maintenance Personnel Certification Program, dated August 4, 1978, is canceled.

4. BACKGROUND. The National Airspace System (NAS) is comprised of a mixture of equipment/systems/services to support the air transportation complex in the United States. In order to verify the continued operation of the NAS, the performance of these equipment/systems/services are periodically certified by technical FAA personnel possessing necessary technical proficiency. The Airway Facilities (AF) Personnel Certification Program establishes a minimum standard of technical proficiency and assures technical competency of personnel. The guidelines in this order will provide national direction for the attainment and retention of personnel certification. The technician must satisfy theory and performance criteria as specified in this order to meet FAA requirements for certification. Following successful completion of the qualification requirements, the FAA technician may be assigned the responsibility of certifying specific services/systems/subsystems/equipment. Only when qualified and assigned responsibility may the technician exercise certification authority.

5. EXPLANATION OF CHANGES. The significant changes are as follows:

a. This order implements the policy established by the latest edition of Order 3400.17, Certification of Personnel Engaged in the Maintenance of Airway Facilities Systems/Subsystems/Equipment.

b. The scope of the certification program is being expanded to include FAA contract technicians who verify FAA facilities. The same procedures and standards will apply to FAA contract technicians as apply to FAA technicians.

c. Retention and disposition requirements for personnel certification records are being established. This file contains an individual's certification record documentation. A database with standardized fields has been established.

d. FAA Form 3400-6, Certification Authority Requirements Agreement, has been changed to a requirement for FAA employees who are newly assigned to positions that require certification authority.

e. Previous references to the Airway Facilities Service has been changed to the Systems Maintenance Service (ASM).

f. Service certification authority has been established.

g. Standard acronyms for certification authority have been established.

h. Certification requirements for technical supervisors have been clarified.

i. The use of FAA forms and records for non-FAA personnel is authorized.

j. The personnel certification program supports the technical certification requirements of the latest edition of Order 6000.15, General Maintenance Handbook for Airway Facilities. It also provides for issuing personnel certification authority on additional systems/subsystems/ equipment/services.

k. This order sets forth the procedures and requirements for issuing personnel certification credentials and specifies the services/systems/ subsystems/equipment for which technicians must acquire personnel certification authority. This order does not identify technical equipment certification requirements.

l. Several of the examinations listed in Appendix 5, Airway Facilities Personnel Certification Program Requirements Examinations, Figure 1, System, Subsystem, or Equipment with Available Examinations, for system/subsystem/ equipment have been available for some time but have not been officially announced. These systems/subsystems/equipment are identified in appendix 5, figure 1, with an asterisk (*) in the mandatory date column and have certification exams listed. To preclude any problems related to time limitations, the mandatory certification date for those specific systems/ subsystems/equipment and examinations announced herein will be 1 year from the date of this directive.

6. FORMS. Refer to Appendix 1, Listing of Forms, for all the forms used in this order.

7. DEFINITIONS. Definitions of some of the terms used in the certification program may be found in Order 6000.15. For the purpose of this order, the following definitions are used:

a. Certification Authority Requirements Agreements. A written acknowledgement by FAA management and FAA employees of the certification requirements of the position and time frame for the employee to acquire the needed certifications.

b. Certification. For the purpose of this order, the terms certification and verification technical proficiency level are normally synonymous for FAA technicians and FAA contract technicians. The term verification shall be used for FAA contract personnel maintaining FAA equipment or when there are significant differences in the program as in the non-Federal program. The requirement for technical proficiency is the same for both the FAA and contract personnel. Technical proficiency does not entitle a contract technician to certify FAA equipment operating in the NAS, pursuant to Order 6000.15. The on-going certification of navigational aids (navaid) in the NAS requires that experienced and certified FAA technicians exercise discretionary judgement. The Office of Chief Counsel has issued a legal opinion stating that a discretionary function performed by Federal agency employees is an inherently governmental function which cannot be contracted to the private sector. Therefore, the FAA cannot contract out nor delegate to a contractor the performance of its on-going certification of navaids. The FAA may contract for the performance of nondiscretionary functions and activities.

c. Certification, Personnel. Confirmation that the individual possesses the necessary minimum knowledge and skills to determine the operational status of a service/system/subsystem/equipment.

d. Certification Record Files. Automated data processing (ADP) record files containing information from FAA Form 3400-3, AF Personnel Certification and Related Training Record, and FAA Form 3400-5, Certification Responsibility, in a database format.

e. Certification Responsibility. The assignment of accountability for the determination of the operational status of specific services/systems/ subsystems/equipment and the documentation in the official facility maintenance log.

f. Certification Record. FAA Form 3400-3.

g. Certification, Service. The verification that the appropriate combination of services/systems/subsystems/equipment advertised to the user has been certified and they are providing or capable of providing the functions necessary to the user and followed by the prescribed entry into the log. The certifying official uses personal knowledge, technical determination, observations, and inputs from other certified personnel to accomplish certification.

h. Certification, System/Subsystem/Equipment. The technical verification performed prior to commissioning and/or service restoration after a scheduled/unscheduled interruption affecting certification parameters and periodically thereafter inclusive of the insertion of the prescribed entry in the facility maintenance log. The certification validates that the system is providing an advertised service to the user or that the system/subsystem/equipment is capable of providing that advertised service. It includes independent determination as to when a system/subsystem/equipment should be continued in, restored to, or removed from service.

i. Certified Personnel. Personnel who are authorized to certify the operational status of certain services/systems/subsystems/equipment.

j. Contractor. Anyone maintaining an FAA facility that is not directly employed by the FAA but is utilized via a contract.

k. Examiner. An individual designated in writing to monitor or conduct examinations.

l. First-Line Technical Supervisor. An employee or designated individual whose primary responsibility includes the technical direction and/or supervision of personnel performing maintenance on and certification of facilities. First-line technical supervisor functions described in this order will be performed by designated FAA officials for contractor and non-Federal technicians.

m. Interim Certification Authority. Certification authority granted to cover new services/systems/subsystems/equipment pending establishment of a mandatory certification date.

n. Mandatory Certification Date. The date from which no new interim certification authority may be issued on a specific type service/system/subsystem/equipment. This date shall be as specified in this order or in subsequent changes to this order and shall be no earlier than 1 year from the date of the change to this order. This date is predicated upon the availability of both theory and performance examinations.

o. Non-FAA Personnel. Any individual not directly employed by the FAA.

p. Non-Federal Technician. A technical person employed by a non-Federal sponsor to maintain and verify a non-Federal facility.

q. Non-Federal Facility. Public use facilities not owned by the U.S. Government that have been approved for instrument flight rules (IFR) in the NAS.

r. Non-Federal Sponsor. The owner of a non-Federal facility. Reference the latest edition of Order 6700.20, Non-Federal Navigational Aids and Air Traffic Control Facilities.

s. Performance Examination. An examination designed to test the technician's proficiency in measuring, evaluating, testing, and determining the accuracy and suitability for use of a particular type service/system/subsystem/equipment.

t. Service. Service is the end product delivered to a user (Air Traffic (AT) personnel or aviation public) that results from an appropriate combination of services/systems/subsystems/equipment.

u. Technician. A generic title that includes, but is not limited to, electronic technicians, engineering technicians, maintenance mechanics, environmental support technicians, engineers, FAA contract technicians, and non-Federal technicians.

v. Temporary Certification. Certification authority issued for limited periods of time as required by unusual circumstances.

w. Theory-of-Operations Examination. An examination to verify that a technician possesses the necessary knowledge of principles and theory of operation for a service/system/subsystem/equipment. Successful completion of this examination indicates a knowledge level equivalent to that of a graduate of an appropriate resident training course.

x. Training Record File. An ADP record file containing training and examination information (theory of operations and performance) in a database format.

y. Verification. Substantiation that an individual possesses the technical knowledge and proficiency to determine the adequacy of the performance of a service/system/subsystem/equipment and the ability to correct malfunctions. The term "verification" applies in the same manner to FAA contract personnel maintaining FAA facilities or nonfederal personnel maintaining non-FAA facilities as the term "certification" applies to FAA personnel maintaining FAA facilities. Only FAA technicians can be authorized to exercise their discretionary judgement to certify FAA equipment operating in the NAS.

8. OBJECTIVES. The objectives of the national personnel certification program are:

a. To assure technical competence of all technical personnel having direct responsibility for the continued safe operation of services/systems/subsystems/equipment critical to the NAS.

b. To establish uniform minimum standards for measuring an individual's technical proficiency.

c. To establish procedures for documenting the individual's technical proficiency, for granting authority, and for assigning service/system/subsystem/equipment certification responsibility to FAA technicians.

CHAPTER 2. PROGRAM ADMINISTRATION

9. SYSTEMS MAINTENANCE SERVICE LEVEL FUNCTIONS. ASM responsibilities in the administration of the personnel certification program are to:

a. Provide overall direction and guidance.

b. Evaluate all aspects of the program.

c. Standardize all aspects of the program.

d. Review and update personnel certification policy and supporting orders.

e. Identify and specify the process and requirements for personnel certification.

f. Coordinate the development and revision of all examinations.

g. Initiate the development and validation of all examinations.

h. Require that the contractors provide performance examinations to new equipment coming on-line.

i. Determine personnel certification requirements that support the services/systems/subsystems/equipment in the NAS.

j. Verify and coordinate the availability of training and examinations to support the personnel certification program.

k. Coordinate the personnel certification program with all related programs.

10. FAA ACADEMY FUNCTIONS. The FAA Academy's responsibilities in the personnel certification program are to:

a. Develop, revise, and validate theory-of-operations examinations.

b. Issue and grade theory-of-operations examinations.

c. Maintain appropriate records of examinations.

d. Distribute certification examinations and changes to the examinations.

e. Develop supportive training material as directed.

f. Develop, administer, and maintain training programs of instruction to support the certification program.

11. REGIONAL AIRWAY FACILITIES (AF) DIVISION FUNCTIONS. The following functions are the responsibility of the regional AF division manager and may be delegated to a designated representative within the region or to the AF sector manager:

a. Exercise regional control of the program described in this order and issue any necessary supplemental or clarifying instructions.

b. Approve requests for theory-of-operations and performance examinations for FAA personnel other than sector personnel.

c. Approve requests for theory-of-operations and performance examinations from sponsors of non-Federal facilities.

d. Maintain verification record files containing complete certification records of technical personnel maintaining non-Federal facilities within the geographical boundaries of the region.

e. Coordinate with other agency offices on matters pertaining to the certification of individuals.

12. AIRWAY FACILITIES SECTOR OFFICE FUNCTIONS. The prime responsibility for administration of the personnel certification and verification program in the field rests with the sector office. Some functions assigned to the sector office may only be accomplished by the sector manager or anyone acting in that capacity. All other functions may be delegated by the sector manager.

a. Functions which shall not be delegated below the sector manager level or anyone acting in that capacity are:

(1) Making the final determination whether technical personnel have demonstrated the minimum acceptable level of technical competency to perform actual duties.

(2) Assigning, withholding, or terminating certification to FAA technicians and verification to FAA contract technicians authority and/or responsibility in writing when the appropriate determination has been made.

(3) Taking appropriate action deemed necessary when technical personnel fail to acquire or maintain the certification/verification authority required for the position occupied.

(4) Determining certification/verification requirements for all technical personnel maintaining NAS equipment within the sector.

(5) Identifying positions that require certification/verification authority.

(6) Designating, in writing, all examining officials.

(7) Assuring that individuals assigned certification/verification responsibilities have properly documented authorizations.

(8) Conducting an annual review of individual certification/verification proficiency and records.

(9) Executing certification/verification authority requirements agreements.

b. Functions which may be delegated below the sector manager level are:

(1) Prescribing the extent of individual preparation necessary for examination or reexamination.

(2) Requesting, scheduling, and administering theory-of-operations and performance examinations.

(3) Exercising proper security precautions to avoid compromise of theory-of-operations examinations. There are no security requirements for performance examinations and they may be used as outlines for on-the-job training (OJT) where no formal OJT courses exist.

(4) Maintaining a file containing complete personnel certification or verification records on each individual requiring authority. The official certification/verification record file shall be maintained at sector headquarters in accordance with the latest edition of Order 1350.15, Records, Organization, Transfer, and Destruction Standards.

13.-15. RESERVED.

CHAPTER 3. CERTIFICATION PROCESS

16. GENERAL. The certification process is a two-phase process consisting of a certification authority phase and a responsibility assignment phase. The certification authority phase requires FAA technical personnel to demonstrate knowledge of the theory of operations and the ability to practically demonstrate this knowledge. It ensures that they possess the minimum skills necessary to certify a given-type service/system/subsystem/equipment in the NAS. The certification responsibility phase is the official assignment to FAA technical personnel to use their authority to certify a specific service/system/subsystem/equipment in the NAS.

17. CERTIFICATION AUTHORITY PHASE. The certification authority phase is the satisfactory completion of the theory, OJT, and performance requirements as specified in this directive on a specific type of service/system/subsystem/ equipment and as documented on FAA Form 3400-3 in the technician's records. OJT requirements will not be documented on FAA Form 3400-3; the appropriate forms for OJT are FAA Forms 3000-14 and 3400-6. Certification authority may be exercised only after responsibility is assigned in writing. Acquisition of certification authority is a four-step process that requires a demonstration of knowledge of (1) theory of operations, (2) OJT formalized training to bring the employee's technical skills to the level expected for maintenance and to prepare the employee for certification, (3) demonstration of performance proficiency, and (4) a review and determination by the sector manager that all procedures have been properly followed and supporting documentation has been prepared.

a. Theory-of-Operations Requirement. Theory-of-operations requirement is the first step of the certification authority process and verifies that the individual possesses satisfactory knowledge of theory of operation of the type service/system/subsystem/equipment. There are several methods listed below by which this may be accomplished. The method used will be determined by the AF sector manager and the employee's supervisor.

(1) Resident training is completion of resident training either at the FAA Academy, out-of-agency, or computer based instruction (CBI). This training shall be applicable to the type of services/systems/subsystems/ equipment for which certification authority is required.

(2) Systems theory-of-operations examination is an ASM-approved written examination which indicates a level of knowledge required by paragraph 17a. These are commonly known as concepts or bypass examinations.

(3) Correspondence study is an ASM-approved correspondence study course. This training shall be applicable to the type of service/system/ subsystem/equipment for which certification authority is required.

(4) Equivalent training is training from sources other than the FAA-sponsored training that has been determined by ASM to be equivalent. Requests

for acceptance of this training must be recommended by the sector manager and forwarded through the AF division manager to ASM for review and approval.

b. OJT Requirements. This will be a requirement for certification once the program is implemented. The second step of the personnel certification authority process (OJT) is a bridge from resident to equipment training to achieve the necessary skills and knowledge in preparation of personnel certification. The development and implementation of the standardized national OJT program is planned to be fully implemented within 3 years.

c. Performance Requirements. The third step of the personnel certification authority process requires successful demonstration of performance proficiency through a combination of accomplishment of work assignments and a performance examination. At the end of this step, the examiner will inform the sector manager of the technician's familiarity with the type of service/system/subsystem/equipment as well as his/her knowledge and ability to perform necessary measurements, adjustments, and fault diagnosis, or to make software corrections where applicable. This step shall not occur before confirmation of successful completion of the first step, theory of operation. There are several methods listed below by which performance proficiency may be accomplished. The method used will be determined by the AF sector manager and the employee's supervisor.

(1) Experience. In order for experience to be creditable, the individual must have received at a minimum, prior to the mandatory certification date, a satisfactory performance rating for a 12-month period during which the individual had full technical responsibility on the service/system/subsystem/equipment for which certification is sought. The first-level technical supervisor shall forward documentation to the sector manager attesting to the technical proficiency of the technician and the time period during which the experience was gained. This documentation and the time period shall be recorded in the technician's certification record or certification record file. Experience gained prior to the failure of a resident course or the theory-of-operations examination on the subject is not creditable. Experience gained prior to the passing of a resident course or a theory-of-operations examination on the subject is creditable.

(2) Performance Examination. After the mandatory certification date, the individual must satisfactorily complete an ASM-approved performance examination conducted by an authorized examiner. The individual will be examined on service/system/subsystem/equipment adjustments, and the specific knowledge required to adequately investigate, analyze, test, and correct service/system/subsystem/equipment deficiencies to restore or ensure continuous reliable operation. A separate performance examination is required on each different type of service/system/subsystem/equipment for which the individual needs certification authority.

d. Additional Services/Systems/Subsystems/Equipment. The requirements for certification authority for similar services/systems/subsystems/equipment may have the same theory-of-operations requirements and some of the same

performance requirements. After certification authority has been granted on a service/system/subsystem/equipment, it is only necessary to complete portions of the performance examination that is unique to the new service/system/subsystem/equipment.

e. Modernization and/or Equipment Replacement of Commissioned Facilities. After any major equipment modification, facilities and equipment (F&E) project, or equipment replacement which results in equipment with new theory of operations requiring additional training, a new certification authority will be required.

f. Review and Confirmation. The fourth step in this phase is accomplished when the sector manager reviews the results of all the testing, assures that all supporting documentation is correct, and determines that certification authority can be issued. The actual issuance is accomplished by an entry on FAA Form 3400-3 signed by the sector manager. As part of this confirmation process, the sector manager will determine what type of certification authority to issue. The three possible types of authority are listed below:

(1) Regular Certification Authority. Regular certification authority may be granted by the sector manager on service/system/subsystem/equipment after satisfying the theory-of-operations and performance requirements. Regular certification authority may also be granted when all of the qualifications for conversion of interim certifications are met.

(2) Interim Certification Authority. Between installation of the equipment and the development of appropriate certification examinations, interim certification authority may be granted by the AF sector manager to employees who have successfully completed a documented formal or informal training, and who are considered by the manager to be proficient to certify the type of service/system/subsystem/equipment. For purposes of interim certification, informal training is that training conducted at the regional or sector level by another technician or a manufacturer's representative, or another course on similar equipment taken previously. Interim certification authority based on informal training cannot be converted to regular authority.

(a) Conversion of Interim Certification Authority. Interim certification authority may be converted to regular certification authority on new types of services/systems/subsystems/equipment provided:

1 Technical personnel meet the requirements of paragraph 17a.

2 Technical personnel have been granted interim certification authority for 12 months and have at least 12 months of satisfactory performance while having full technical responsibility.

3 The interim authority was granted before the mandatory certification date.

(b) Interim certification authority shall be revoked from a technician who subsequently fails the formal training course or theory-of-operations examination or the performance examination that pertains to the specific interim authority. Interim authority shall also be revoked whenever regular authority is issued on the same service/system/ subsystem/equipment or certification responsibility is no longer assigned. Revocation shall be fully documented on FAA Form 3400-3.

(3) Temporary Certification Authority. Temporary certification authority may be granted by the AF sector manager on a type of service/ systems/subsystems/equipment, after the mandatory certification date has passed, based upon an administrative determination of need. Such certification authority should only be granted during UNUSUAL circumstances; i.e., when there is an immediate need and the normal process would take too long. This authority may be granted for no longer than 3 months at a time and shall not be granted to the same individual more than twice on the same service/system/subsystem/equipment within any 12-month period. The AF sector manager shall be satisfied with the proficiency of the technical person. If the individual to be issued temporary certification authority has not previously met the applicable theory requirements, the training used in lieu of the theory requirements should be related. (Examples: A technician certified on a Mark 1b instrument landing system (ILS) may be issued temporary certification authority for a Mark 1d ILS. On the other hand, training on communications equipment cannot be considered applicable to ILS.) Temporary certification authority shall not be issued to technical personnel who, on their last attempt, failed either the theory or performance options for the pertinent service/system/subsystem/equipment. The granting of such temporary certification authority shall be formally and fully documented.

g. Service certification authority ensures that all constituent systems/subsystems/equipment are capable of providing their advertised services and have a current certification. The service-certifying official uses personal knowledge, technical determinations, observations, and inputs from other certified personnel.

(1) Service certification authority shall be issued for the services listed in appendix 5, figure 2.

(a) Theory requirements shall be satisfied when either certification authority has been issued on a major system type that makes up a part of the service; i.e., any localizer (LOC) certification authority qualifies an individual to certify ILS service; or theory-of-operations examinations or training has been successfully completed.

(b) Performance requirements shall be based on performance examinations.

(c) Interim certification authority may be granted when theory and performance examinations are not available.

(2) Service certification authority shall be documented on FAA Form 3400-3.

18. RETENTION OF CERTIFICATION AUTHORITY.

a. When an individual attains certification authority for a specific type of service/system/subsystem/equipment, he/she shall retain this authority until revoked as a result of one of the circumstances described below:

(1) When the maximum period allowable for temporary certification authority is reached.

(2) When there is a subsequent failure of formal training or examination pertinent to an interim certification authority.

(3) When temporary and interim certification authority is replaced by regular certification authority for the same service/system/subsystem/equipment.

(4) When it is determined by the AF sector manager that the technician's proficiency (performance and/or knowledge of theory) has deteriorated to such a level that continued certification of the equipment by the technician might render it unusable or unsafe for use. The technician shall be notified in writing of such action and ordered to promptly acknowledge receipt of the notification to the office issuing the revocation notice. The date of the notification and action shall be entered in the technician's record. Immediately upon revocation of certification authority, the technician shall be counseled and a written program designed to restore the necessary proficiency shall be implemented. The technician shall be given an opportunity to reacquire certification authority in accordance with the process described in this order.

(5) After a period of inactivity of 2 years or longer, prior to assignment/reassignment of certification responsibility for a particular service/system/subsystem/equipment, the proficiency of the technician will be reviewed by the immediate supervisor who will forward a written recommendation to the sector manager as to whether or not the technician's certification authority should be revoked. The extent of this review shall be based upon the supervisor's judgment. It may vary from the observation of the technician's on-the-job work performance to requiring the technician to retake certification performance and/or theory-of-operations examination(s). Inactivity shall not be an automatic cause for revocation of a technician's certification authority.

(6) When certification authority is discovered to have been erroneously granted, it shall be revoked by the AF sector manager. Certification authority found to have been fraudulently obtained (e.g., cheating on examinations or misrepresentation) shall be revoked, and appropriate action shall be taken by the AF sector manager.

b. Certification authority previously granted shall not be affected by later changes in examination and/or course configurations. For example, authority granted for airport surveillance radar (ASR) or air route surveillance radar (ARSR) on the basis of successful completion of the R1, Basic Radar, certification theory examination is still valid although the R1 has been replaced by the R10, Radar Principles A; R11, Radar Principles B, plus R25, ASR-4/5/6 Transmitter Site, for ASR; and R29, ARSR-1/2, for ARSR. Several new tactical air navigation (TACAN) examinations have been developed to supplement the N2, TACAN, certification concepts examinations; however, the authority now being held for TACAN equipment based upon prior successful completion of the N2 examination is still valid.

19. CERTIFICATION RESPONSIBILITY PHASE. Assignment of certification responsibility is the second and last phase of the certification process. It is this phase that enables a technician to exercise his/her certification authority to certify a discrete service/system/subsystem/equipment. The assignment of certification responsibility does not automatically follow the acquisition of authority. A sector manager may assign an employee such responsibility provided all the following criteria are met:

a. The technician possesses proper certification authority.

b. The technician's supervisor:

(1) Is satisfied with the technician's competence.

(2) Prepared a written statement attesting to the fact that the technician had acquired the practical experience and proficiency needed to perform the assignment. A signed FAA Form 3400-5 may suffice as this written statement.

c. The sector manager has ascertained that the proposed certification responsibility assignments are required and are compatible with the technician's position.

d. The sector manager shall assign certification/verification responsibility in writing on FAA Form 3400-5 or a computer-generated form similar to FAA Form 3400-5. For non-Federal technicians, the sector manager will issue verification authorization in writing, but not on FAA Form 3400-5.

e. Certification responsibility assignments to FAA developmental and lower-grade FAA technicians who have not achieved full journeyman grade level, but who have acquired certification authority, shall be in accordance with the following provisions:

(1) The United States Civil Service Commission Position Classification Standard for Electronic Technicians, Series GS-0856-0, dated October 1962. Technicians may be assigned certification responsibility, via

appropriate detail, on services/systems/subsystems/equipment at a higher level facility (e.g., GS-7 assigned responsibility for a GS-9 level facility, a GS-9 to a GS-11 level facility, or a GS-11 to a GS-12 level facility).

(2) Assignment of certification responsibility to a lower-grade or developmental technician. This shall be treated as a temporary detail to the journeyman position. All details are subject to the applicable Office of Personnel Management and FAA regulations. A copy of the temporary detail documents shall be filed in the sector certification and related training file.

20. RETENTION OF CERTIFICATION RESPONSIBILITY.

a. Once a technician is assigned certification/verification responsibility for a specific service/system/subsystem/equipment, the first-line technical supervisor and the technician shall ensure that the individual retains proficiency for as long as the certification/verification responsibility remains in effect.

b. The first-line technical supervisor shall review the proficiency of each technician who is assigned certification/verification responsibility. This may be an informal review by observation of the technician's on-the-job performance or a formal examination of the technician's ability to perform designated procedures and adjustments. A proficiency review shall be accomplished under any of the following conditions and appropriate written recommendations forwarded to the sector manager for his review and inclusion in the technician's certification folder:

(1) Annually (as defined in Order 6000.15).

(2) Whenever a question arises concerning the individual's technical competency.

c. Review and Confirmation. The sector manager confirms the supervisor's review and recommendation. This review may include supporting documents such as certification authority records, Facility Master File, and certification responsibility assignment records. This proficiency review shall be documented and signed by the sector manager on the technician's record. A separate record shall be utilized to document the annual proficiency review. No other entries will be entered on the annual review form. See example in appendix 1, figure 1.

d. Certification/verification responsibility shall be terminated in writing under the following conditions:

(1) When certification/verification authority is revoked.

(2) When a facility for which responsibility is assigned is decommissioned.

(3) When a facility is modified or equipment replaced which requires additional training and/or theory and performance examinations and the technician is no longer qualified.

(4) When proficiency review in paragraph 20b(2) determines that it is warranted.

(5) When it has been determined by management that the responsibility assignment is no longer required.

(6) When a technician is transferred to another organization.

(7) When a technician has a change of permanent duty station and equipment is not the same.

CHAPTER 4. THEORY-OF-OPERATIONS AND PERFORMANCE EXAMINATIONS

21. GENERAL. All examinations (theory and performance) used in the certification program shall be developed and validated under the control and administration of ASM. When made available, these examinations shall be used to determine whether the examinee possesses the theoretical knowledge and practical techniques required to certify a service/system/subsystem/ equipment. Equipment examinations are comprehensive in scope, covering not only the equipment within a system, but also the auxiliary equipment considered to be part of the system. Software examinations cover utility, support, and diagnostic programs as well as the programs, subprograms, routines, and subroutines of a major program system. Only examinations authorized by ASM shall be used as a basis for issuing regular certification authority.

22. THEORY-OF-OPERATIONS (CONCEPTS) WRITTEN EXAMINATIONS. In order to provide a route leading to certification authority, other than through resident training, a written theory-of-operations examination may be used. The scope and depth of a particular examination is representative of the knowledge required to perform effectively on the job. Those who have had prior training or experience that indicates the attainment of this level qualify to take the theory-of-operations examinations. Prerequisites for the theory of operation examination(s) are the same as for the course(s) to be bypassed. Where resident training is not available, the theory-of-operations examination is the principal means of measuring the understanding of the theory of operations of a service/system/subsystem/equipment.

a. Request for Theory-of-Operations Examinations.

(1) These examinations shall not be requested unless there is a reasonable expectation that they will be passed. Under no circumstances shall a theory-of-operations examination be used as a screening device to determine the probability of any technician passing the corresponding FAA Academy course.

(2) Theory-of-operations examinations shall be requested by the regional AF division manager or sector manager as appropriate. The examinations may be a hard copy by mail or via CBI using CBI terminal identifier.

(3) These examinations will be maintained by the Examination Control Center, AMA-412.

(4) Each request shall include the examinee's name, social security number (SSN), and the sector office address. If the examination is not administered to the designee within 30 calendar days after receipt, it shall be returned unopened to the Examination Control Center. The AF division manager or sector manager may use the examination for another technician

provided this is not a retake examination for this technician. If it is to be a retake examination, coordination with the Examination Control Center must be accomplished to assure it would be appropriate. A letter of explanation concerning the name change shall accompany the completed examination when returned to the Examination Control Center.

(5) The completed examination shall be returned immediately to the Examination Control Center. The regional AF division manager or AF sector office shall be advised of the grade as quickly as possible. In the event of a failure, a resume of the individual's weak points shall accompany the grade if the grade equals or exceeds 50 percent. No resume will be provided for grades below 50 percent as all areas are considered weak.

(6) The AF division or sector office shall make the distribution of the concepts examination grade report and document the grade in the technician's record.

b. Integrity of Theory-of-Operations Examinations. All segments of the agency concerned with the certification process shall maintain security in the handling of written examinations. Compromise of examinations in any form is a serious violation of the rules of conduct and discipline. Violations in this area shall require official disciplinary action by the appropriate official.

(1) Security of theory-of-operations examinations includes, but is not limited to, the following:

(a) Locked and secured storage (combination lock or equivalent).

(b) An accountability system is in place to ensure examinations are returned within 30 calendar days after receipt.

(c) Distribution of examinations is limited to certified mail, responsible messenger, or CBI.

(d) Examinations are kept sealed except when being administered.

(e) All working notes are returned with the completed examination.

(f) Examination contents shall not be discussed or otherwise compromised.

(g) Absolutely no reproduction or copying of any part of the examination.

(h) Use only the materials provided by the Examination Control Center for a "closed-book" theory examination.

(2) Any person having personal knowledge of a compromise on any segment of the written examination shall immediately advise the sector manager or the AF division manager of the incident. Anyone having knowledge of a violation and failing to report it or take appropriate action may be subject to the same penalty as the individual guilty of the violation.

23. PERFORMANCE EXAMINATIONS. Performance examinations are used to demonstrate proficiency. Examinations may vary in length according to the complexity and scope of the service/system/subsystem/equipment. They involve demonstration of adjustments or software program changes with observable results and may also include the correction of introduced defects and equipment maladjustments. A series of adjustments or software program changes may be required before a measurement of accuracy is made. Once the examinee has completed an operation, the examiner will grade the performance. Certain operations are considered LOCKOUT items and a failure on any one of these items constitutes a FAILURE OF THE ENTIRE EXAMINATION. The use of reference material during the performance examination is encouraged.

a. Deviation from the Printed Examination is Allowed. The examiner may deviate from the printed examination to assure the required proficiency; however, the examinee shall be notified of any deviations from the printed examination prior to taking the examination and given enough time to prepare her/himself. Any deviation prior to the administration of the selected performance examination must have the sector manager's approval in advance and the examinee advised in advance that the deviation will be graded and that the deviation has been approved by the sector manager. The sector manager shall forward any approved and graded deviations to the Examination Control Center for consideration and inclusion in the examination.

b. Source of Performance Examinations. The Examination Control Center will print and maintain a continuing supply of performance examinations. Examinations may be requested or copied from CBI or locally reproduced.

c. Ordering and Handling of Performance Examinations. Secure handling of performance examinations is not required. Examinations should be provided well in advance of administration so that certification candidates can make themselves fully aware of the contents and test equipment required.

d. Use of Performance Examination as Study Guide. Where no published OJT-II course exists, a performance examination may be used as a study outline. If the performance examination was used as the OJT outline, then the same individual used to provide the OJT should not be the performance examiner.

24. UNIQUE SYSTEMS EXAMINATIONS. There are several one-of-a-kind or limited-number systems. These systems shall be included in the national personnel certification program if they qualify. Any region having such a system shall advise the Maintenance Operations Division, ASM-200, on how the region plans to proceed with the development of the necessary examinations. Existing theory-of-operations and performance examinations on similar

equipment may be used where appropriate. Draft copies of newly developed examinations shall be forwarded to ASM-200 for review, coordination with other regions having a like system, validation, and inclusion in the national program. REGIONS SHALL NOT USE UNAUTHORIZED EXAMINATIONS AS A BASIS FOR THE ISSUANCE OF REGULAR CERTIFICATION CREDENTIALS.

25. FAA THEORY-OF-OPERATIONS AND PERFORMANCE EXAMINATIONS. The inventory of FAA theory-of-operations and performance examinations shall be used by FAA, FAA contract, and non-Federal technicians. There shall be no duplication of effort to develop unique examinations solely for the purpose of examining FAA contract or non-Federal technicians.

26. EXAMINATION VALIDATION AND UPDATING. Certification examinations are constantly reviewed and updated. Examinations are combined or eliminated when found to be redundant or obsolete. Any examiner who detects improper questions, or who is administering an examination that is not intended for the system involved, should include an appropriate comment with the examination when returning it to the Examination Control Center. The AF division manager will also be advised through appropriate channels of any improper questions, procedures, or references for consideration and forwarding to ASM-200.

a. Theory-of-Operations Examinations. Normally, the concept examination must be completed in its entirety in order to receive credit on the examinee's training record and equivalency as stated in paragraph 22. When an intermix of equipments results in a configuration where only portions of existing examinations are appropriate, the relevant portions may be used (i.e., Mark 1a LOC, Mark 1b glide slope (GS), and tube-type (TT) markers). The determination of the portions to be used should be made by the examinee's supervisor or examiner and coordinated with the sector manager. The Examination Control Center shall be notified in writing and the entries in the technician's record should reflect the parts of the examination that were taken.

b. Performance Examinations. The examiner may change the performance examinations to make them compatible with the actual system used. Operations and questions other than those listed on the performance examination may be used to assure the examinee's total system knowledge. The examinee shall be advised prior to the examination of any deviations to be graded that have been approved by the sector manager. Regions shall recommend to the Examination Control Center changes which should be made to examinations because of changes in maintenance procedures, system configurations, or testing equipment/ techniques.

27.-28. RESERVED.

CHAPTER 5. RELATIONSHIP OF CERTIFICATION TO FAA EMPLOYMENT

29. QUALIFICATION STANDARDS. Existing standards published by the Office of Personnel Management (OPM) prescribe minimum appointment qualifications for each series and grade. Additional qualification requirements have been established for AF technical personnel by the Civil Service Commission (CSC), 1962 Classification Guide, and the Department of Transportation (DOT), 1972 Classification Guide. They additionally require that most FAA technical personnel obtain and retain certification authority and responsibility for their positions. Procedures for obtaining this authority and responsibility are described in this order. Failure to obtain or retain the appropriate certification authority and responsibility may constitute disqualification for the position.

a. Initial Certification Requirements. The sector manager shall assure that FAA employees new to a position requiring certification are counseled on the certification requirements for their new position. A plan shall be established to ensure the employee fully qualifies for the new position within a reasonable timeframe. FAA Form 3400-6 and FAA Form 3000-14, Airway Facilities Training Plan, shall be executed committing FAA management and the employee to a program to achieve the required certifications. The sector manager may extend the time limits for completing the agreement if conditions beyond the control of the employee are encountered. See appendix 1, figure 3, pages 11-13, for example.

b. Additional Certification Requirements. Existing employees who are otherwise fully qualified for their position are frequently faced with new requirements for additional certifications due to new facilities and equipment upgrades. When this occurs, the first-line supervisor, in concert with the sector manager, shall develop a training plan to meet the additional requirements. If the employee fails to satisfactorily complete the prescribed training plan, the failure may be an employee performance problem and appropriate action taken.

30. ACTION FOLLOWING FAILURE TO FULFILL CERTIFICATION REQUIREMENTS. If, after the prescribed time limits, the individual has not satisfactorily completed all of the requirements for certification authority, the avenues of action listed below will be considered by the regional AF division manager or sector manager. The selected action will be carried out through existing procedures and authorities.

a. Reassignment. When an employee has failed to become certified, reassignment to a vacant position for which he/she can qualify shall be considered. It is not mandatory that the new assignment be at a location or be a type of work preferred by the employee.

b. Reduction in Status. Reduction in status; i.e., from supervisor to non-supervisor at the same grade level, may be necessary to reassign an employee who has been unable to meet the certification requirements.

c. Reduction in Grade. Reduction in grade may be considered for those employees who are unable to meet the certification requirements and for whom no acceptable equivalent vacancy can be found. Any adverse action would be based upon the employee's inability to perform the duties of the assigned position.

d. Separation. Employees in positions requiring certification authority may be subject to separation action in accordance with OPM regulations if they are unable to become qualified through the several methods allowed. This action would be based upon the employee's inability to perform the duties of the position.

31. SYSTEM THEORY EQUIVALENCY. The technician certified through a system theory-of-operations examination shall be considered equal to a technician certified through formal agency training. WHEN A SELECTION IS MADE TO FILL A VACANCY, THE METHOD OF OBTAINING CERTIFICATION SHALL NOT BE A FACTOR IN THE SELECTION.

32.-35. RESERVED.

CHAPTER 6. EXAMINERS AND EXAMINATION PROCEDURES

36. SELECTION OF EXAMINERS. Each AF division/sector manager has the responsibility for selecting examiners who can demonstrate qualities of objectivity and fairness in conducting an examination. Examiners will administer pertinent examinations in both testing phases of the certification process; that is, systems theory-of-operations and system performance.

a. Theory-of-Operations Examiner Requisites.

(1) The examiner shall be designated in writing.

(2) The examiner need not hold certification authority since the duties are monitoring only.

b. Systems Performance Examiner Requisites.

(1) The performance examiner shall be designated in writing.

(2) The performance examiner must possess certification authority for the entire system on which he/she examines another technician. In order to initially start the certification process for a particular service/system/subsystem/equipment, the performance examiner may be issued temporary or interim certification authority as explained in paragraph 17.

(3) The performance examiner shall be an employee of the FAA.

(4) The performance examiner shall not occupy a position under the supervision of the individual being examined.

(5) Performance examiners who are external to the local organizational entity are preferable.

(6) The performance examiner shall not be an individual who was administered the same performance examination by the examinee.

37. PROCEDURES GOVERNING ADMINISTRATION OF AN EXAMINATION. The following procedures shall apply to the administration of examinations given within this program:

a. Theory-of-Operations Examination. The examiner shall:

(1) Understand and apply mandatory secure handling requirements to protect the integrity of the program (paragraph 22b).

(2) Not discuss or disclose the contents of an examination with the examinee.

(3) Advise the examinee on the official nature of the documents and penalties involved for disclosure of their contents.

(4) Prepare an appropriate area for the administration of the examination, give the examinee any required instructions, materials, control and time the examination as prescribed, and process the completed examination as instructed.

(5) Store examinations in a secure place.

(6) Assure all scratch paper and notes are returned to the Examination Control Center with the examination.

(7) Allow the examinee access to only the reference material provided by the Examination Control Center if the examination is designated as closed book.

(8) Annotate the examination as to which questions are applicable for the system or configuration on which the test is intended.

NOTE: No one other than the examiner shall be allowed in the immediate presence of the examinee(s) while the examination is in progress.

b. Performance Examinations.

(1) The distribution of the performance examinations to individuals prior to their actual administration is required and any approved deviations must also be provided in writing to the examinee. Individuals requiring certification authority shall be made thoroughly familiar with the examination requirements and related procedures during OJT.

(2) The examinee will complete the examination tasks unassisted, except in instances where two people are required to make a particular adjustment.

(3) The examiner should be thoroughly familiar with the instructions and procedures pertaining to the performance examination.

(4) The examiner should make specific comments regarding the examinee's performance, procedures, failures, and other observations on the back of the cover sheet.

(5) The examiner shall assure that the facility is operating normally at the conclusion of the examination or at any breaks in the examination and shall make appropriate log entries.

38. RETAKING EXAMINATIONS. Examinations, either written or performance, shall not be readministered to individuals who have failed to pass a previous examination unless either at least 30 calendar days have passed and measurable training progress has been made or a waiver to the 30-day time limit has been granted by the AF division/sector manager. If an appropriate subdivision can be made, retakes may be limited to those subject areas of the examinations

that the examinee has failed (e.g., the GS portion of an ILS examination, or receiver portion of an ASR examination). Reexamination logically falls into two categories as listed below.

a. Retakes of Theory-of-Operations Examinations. No more than two retakes of a theory-of-operations examination shall be permitted within a rotating 12-month period unless a waiver is granted by the regional AF division manager. In the event of a failure by an individual requiring certification authority, a written improvement program shall be promptly prepared for the individual. The improvement program shall be documented in the official certification record file and shall list the following:

(1) Areas of knowledge deficiencies.

(2) Recommended study material.

(3) Methods for measuring progress.

(4) Time schedule for completion of the improvement program.

(5) Instructor and method of documenting training identified.

b. Retakes of Performance Examinations. The supervisor shall determine, prepare, and document an improvement program for an individual who requires certification authority but has failed a performance examination. The improvement program shall be documented in the certification record file and approved by the responsible AF sector manager. The improvement program shall:

(1) List areas of performance deficiencies.

(2) Itemize OJT requirements.

(3) Establish a time schedule for completion.

(4) Identify instructor and method of documenting training.

39. FAILED EXAMINATIONS. Examinations, answer sheet comments, notes, or correspondence pertaining to a failed theory-of-operations examination must be retained in accordance with Order 1350.15. Failed performance examinations will be a part of the documented makeup program and retained in accordance with Order 1350.15.

CHAPTER 7. EXAMINEES

40. GENERAL. Order 6000.15, appendix 3, lists the services/systems/subsystems/equipment that requires equipment certification. Individuals assigned to certify that these services/systems/subsystems/equipment are providing the required or advertised services to the user shall possess the appropriate personnel certification authority and responsibility assignment. Based upon the requirements of the position and the past training and experience of the individual, the AF sector manager shall determine the steps necessary for the development of the individual to acquire the certification authority. Appendix 4, figure 1, lists the current personnel certification authority acronyms. As additional personnel certification requirements are developed for new services/systems/subsystems/equipment, ASM-200 will update this appendix. Short-term notification may be made by Action Notice to the regions.

41. INDIVIDUALS REQUIRING CERTIFICATION AUTHORITY. Individuals required to hold certification authority for services/systems/subsystems/equipment are identified below:

a. All FAA technicians assigned responsibility for certification of services/systems/subsystems/equipment. Sector managers shall establish position requirements based on operational needs.

b. FAA contract technicians maintaining FAA or joint-use FAA/military services/systems/subsystems/equipment (verification authority).

c. Non-FAA technicians maintaining non-Federally owned facilities which are in the NAS (verification authority).

d. First-line technical supervisors of employees designated in paragraph 41a shall possess certification authority on at least one complex system(s) under their jurisdiction.

e. Performance examiners.

f. Other technicians as required by duties or administrative determinations.

42.-46. RESERVED.

CHAPTER 8. FILES, FORMS, RECORDS, AND REPORTS

47. FILES. An official "certification/verification/training" record file (electronic or paper) shall be established and maintained in the sector headquarters on each individual requiring certification/verification authority. Sector field offices and units having personnel certification program responsibilities may maintain an informational "certification/ verification/training" file (electronic or paper) in accordance with Order 1350.15.

a. Each official "certification/verification/training" record file shall contain sufficient documentation to substantiate the technician's qualifications to possess certification/verification authority and responsibility on a specific service/system/subsystem/equipment. The official certification/ verification training record file shall contain the following:

(1) Certification/verification authority record FAA Form 3400-3 (or similar automated form).

(2) Theory-of-operations results recorded on FAA Form 3400-3 (or similar automated form).

(3) Performance examination results recorded on FAA Form 3400-3 (or similar automated form).

(4) Copy of current certification responsibility assignments.

(5) Documentation of technician proficiency reviews.

(6) Current certification authority requirements agreements.

(7) Current training plan.

(8) Active written improvement/makeup plans.

(9) Verification authorizations for FAA contract technicians and non-Federal technicians.

b. Reassignment. When an employee covered by the AF certification program is reassigned to another sector, the official "certification/ verification/training" record file shall be transferred by certified mail, return receipt requested, or by messenger to the employee's new sector headquarters. In all other cases when a technician leaves the sector's jurisdiction, the official certification/verification/training record files will be forwarded to the AF division via certified mail for disposition or retention in accordance with Order 1350.15.

c. Retention. The official certification record case file shall be retained by the AF division in accordance with Order 1350.15.

48. FORMS. The forms associated with the AF Maintenance Personnel Certification Program are described below. A copy of all forms shall be included in the individual's certification and training file until the maintenance management system's (MMS) personnel certification and training subsystem (PCT) is implemented.

a. FAA Form 3400-3, AF Personnel Certification and Related Training Record, see appendix 2, figure 1. This form or similar automated record shall be used to record the status of each individual in the certification program. It shall specify in detail an individual's certification authority. The information on the form shall include, but is not limited to, the following:

(1) All certification authority issued, including temporary and interim.

(2) All correspondence study: FAA Academy courses, OJT, out-of-agency training, regional training, certification performance examinations whether passed or failed, and dates of completion.

(3) Signature and/or initials of responsible official.

(4) The beginning and ending dates in which experience was acquired when experience is used in lieu of a performance examination.

(5) Date certification authority on a specific service/system/subsystem/equipment is revoked.

b. FAA Form 3400-5, Certification Responsibility (see appendix 2, figure 2). This certification responsibility document or similar automated record is the means of officially assigning certification responsibility to FAA employees. FAA Form 3400-5 shall be signed by the employee, the immediate supervisor, and the sector manager. A copy of this form shall be included in the sector's official certification/verification/training record file.

c. FAA Form 3400-6, Certification Authority Requirements Agreement, appendix 1, figure 3, is to be used when an employee enters a new position requiring certification authority. A certification authority requirements agreement would not be required when an employee presently in a position accrues a new certification authority requirement for that position.

49. REPORTS. The AF Personnel Certification Program entails the recordkeeping and retention of information in sufficient detail so as to substantiate the requirements imposed herein. These reports (paper or electronic), regardless of media, shall be maintained in accordance with Order 1350.15. Normally, this information will be contained in a database format. The information blocks contained in the FAA forms listed herein may be computer generated in report format to meet the requirements of this order.

50. COMPUTER SECURITY, PRIVACY, AND FREEDOM OF INFORMATION ACT. Certain legal restrictions are placed on the collection, use, and dissemination of information. (See the latest editions of Order 1280.1, Protecting Privacy of Information About Individuals, and Order 1600.54, FAA Automated Information Systems Security Handbook.) These requirements must be applied, when and where appropriate, to the provisions of this directive. Paragraph 48 describes these requirements. Accreditation of the automation program and equipment shall be obtained from the regional Civil Aviation Security division. See Order 1600.54 for procedures.

51. AUTOMATION OF RECORDS. Implementation of a national standard database for certification and training is required to key the system concepts and certification requirements for the position to the training history of the technician in that position. Automation permits the generation of FAA Form 3400-3, AF Personnel Certification and Related Training Record, FAA Form 3400-5, Certification Responsibility, and FAA Form 3000-14, Airway Facilities Training Plan. The database shall provide a cumulative (historical) record of the personnel certification/ verification/training record for each technician. FAA Forms 3400-3 superseded by automation should be retained for historical purposes.

a. Authority. Regions and/or sectors are authorized to automate personnel certification and training records until the MMS PCT is implemented.

b. Automated Forms. The computer-generated forms/reports shall contain, as a minimum, the information required on FAA Form 3400-3, FAA Form 3400-5, and FAA Form 3000-14.

c. Database. Personnel certification and training is included in the MMS and the data fields have been defined for that program. The databases to support the automated certification authority and certification responsibility forms should comply with the MMS data field requirements. Appendix 2, figure 1, contains a listing of the fields and their field lengths. Existing databases are exempt from this requirement until 1997. Any future changes or additions should comply with the MMS requirements.

(1) Standard acronyms for issuing certification authorities have been developed and are contained in appendix 4, figure 1. These were developed in a format that accommodates automation, and their use is mandatory in certification databases.

(2) Databases shall be electronically backed up and the back-up files should be secured in a fireproof environment or at another location. The retention of these files shall be in accordance with Order 1350.15.

d. Signatures. Databases with electronic signatures will only be permitted if they meet the requirements of GSA, NARA, and legal. Paper copies of automated reports that do not have electronic signatures must have original signatures. A block will be provided on the forms for the sector manager's signature. This signature validates existing data.

CHAPTER 9. VERIFICATION OF PERSONNEL MAINTAINING NON-FEDERAL FACILITIES

52. GENERAL. Non-Federal public-use facilities that have been approved for instrument flight rules (IFR) and air traffic control (ATC) procedures in the NAS are required to meet the Federal Communication Commission licensing requirements, and, in addition, technicians maintaining these facilities must show that they have the special knowledge and skills needed to maintain these facilities. It is the responsibility of the regional AF division to administer this program, but portions may be delegated to the AF sector.

53. RESPONSIBILITY FOR NON-FEDERAL FACILITIES. It is the responsibility of each AF division manager to identify non-Federal facilities in his/her geographical area which are used, or will be used, in the NAS and have been approved for IFR and ATC procedures as outlined in Federal Aviation Regulations (FAR) Part 171. He/she shall establish methods for the appropriate regional personnel to "verify" the capability of non-FAA personnel who are assigned maintenance responsibility for these facilities. This verification shall be accomplished through the administration of suitable examining procedures as delineated in this order.

54. PROCEDURES FOR VERIFICATION OF PERSONNEL MAINTAINING NON-FEDERAL FACILITIES. Personnel responsible for the maintenance of non-Federal facilities described in paragraph 53 shall show that they have the special knowledge and skills required to adequately perform this task. This will be accomplished through satisfactory completion of an appropriate FAA Academy conducted course, an FAA-approved factory conducted training course, or satisfactory completion of theory of operation and performance examinations administered by FAA employees. Performance examinations shall be administered by FAA employees who possess certification authority on the appropriate type of non-Federal facility. Appendix 7, figure 1, contains a list of the types of non-Federal facilities and the appropriate examinations for each type. The above procedure is the normal verification process for technicians maintaining non-Federal facilities and shall be adhered to except in cases where appropriate examinations are not available, in which case verification may be by interim verification methods (see paragraph 55).

55. EFFECTIVE DATE OF VERIFICATION OF PERSONNEL MAINTAINING NON-FEDERAL FACILITIES. Upon approval of a non-Federal system for use in the NAS, action will be taken to initiate development of appropriate examinations to validate the knowledge and skills of personnel having maintenance responsibility for the equipment. The "effective date of verification" shall be 1 year after the announced availability date of the examinations for the particular system. After the "effective verification date," responsibility for the performance of a system shall be assigned only to those individuals possessing the authority granted under the provisions of paragraph 52. The "effective verification date" is April 13, 1974 for systems incorporated into the NAS prior to March 12, 1973.

a. Personnel maintaining equipment incorporated in the NAS, who have received verification authority in any form prior to March 12, 1973, and have maintained proficiency, shall not be required to take examinations on the same system(s).

b. Non-Federal technicians assigned maintenance responsibility for presently approved systems or responsible for new systems, as they are approved for incorporation into the NAS, shall meet the requirements of paragraph 53.

56. INTERIM VERIFICATION PROCEDURES. Examinations may not be available immediately for non-Federal systems added to the NAS. Under these circumstances, interim verification authority may be granted upon satisfactory completion of an oral examination administered by a qualified FAA examiner, and a demonstration of ability to perform the tasks outlined in the equipment instruction book. Interim credentials may be converted to regular authority as long as the employee has performed his/her duties competently for at least a 1-year period and has satisfied theory requirements.

57. VERIFICATION CREDENTIALS AND RECORDS. The individual examinee and the organization to which he/she belongs, shall be issued a written notice of successful completion of the verification requirements. This may take any form deemed appropriate by the responsible regional AF division. The regional AF division shall maintain a record of all non-Federal facilities within their area of jurisdiction, the names of the sponsoring organizations, and the names of the technical personnel granted verification authority for each system. The use of FAA Form 3400-3 for non-Federal verification is authorized.

58. DEVELOPMENT OF VERIFICATION EXAMINATIONS. When approval is granted for IFR and ATC procedures using new types of non-Federal facilities that are not already included in the NAS, the cognizant regional AF division manager shall notify ASM-200 of the new type of facility, location, and the intended commissioning date. ASM-200 will then initiate action to have suitable verification examinations developed as soon as possible.

59. GRADING. Theory of operation examinations shall be graded exclusively by the Examination Control Center.

60. STORAGE. Storage of written examinations shall be limited to the Examination Control Center. Under no circumstances shall theory-of-operations examinations be in the custody of non-FAA personnel. A supply of performance examinations may be maintained in each region and/or copied from CBI.

61. TRAINING FOR NON-FEDERAL PERSONNEL. The FAA Academy maintains an elaborate correspondence, resident, and CBI training program for FAA personnel. However, these courses and training manuals may be made available to non-Federal personnel on a reimbursable cost basis. Persons desiring to obtain FAA training courses or manuals should contact the appropriate personnel at the address listed below:

FAA
Mike Monroney Aeronautical Center, AAC-911
P. O. Box 25082
Oklahoma City, OK 73125

APPENDIX 1. LISTING OF FORMS

The following forms are available through normal channels:

FORM NO.	TITLE	NSN/UNIT OF ISSUE
FAA Form 3400-3	AF Personnel Certification Authority and Related Training	0052-00-648-4004 Sheet
FAA Form 3400-5	Certification Responsibility	0052-00-842-8001 Sheet
FAA Form 3400-6	Certification Authority Requirements Agreement	0052-00-843-0001 Sheet
FAA Form 3000-14	Airway Facilities Training Plan	0052-00-888-4000

APPENDIX 1. LISTING OF FORMS (CONTINUED)

FIGURE 1. INSTRUCTIONS FOR PREPARING FAA FORM 3400-3, AF PERSONNEL CERTIFICATION AND RELATED TRAINING RECORD FOR ANNUAL PROFICIENCY REVIEW

1. Technician's name (last, first, and middle initial).

2. Technician's social security number.

3. Technician's occupational series (for example, GS-855, GS-856, WG-4742, WG-4749, contractor, non-Federal, etc.). The grade level shall not be used.

4. Leave blank.

5. Leave blank.

6. Leave blank.

7. Leave blank.

8. Leave blank.

9. Leave blank.

10. Leave blank.

11. Leave blank.

12. Leave blank.

13. Leave blank.

14. Leave blank.

15. The technician's current duty station (for example, MEM AFS) (for contractor and non-Federal technicians use sector cost code), date of the action, description of the action, which is annual review for proficiency, written signature of sector manager and routing symbol of the sector manager.

16. Leave blank.

APPENDIX 1. LISTING OF FORMS (CONTINUED)

Figure 1-1. SAMPLE FAA FORM 3400-3 AS ANNUAL REVIEW

PAGE NO. AR-1

AF PERSONNEL CERTIFICATION AND RELATED TRAINING RECORD

1. EMPLOYEE'S NAME	2. SOCIAL SECURITY NUMBER	3. SERIES (GS OR WG)
Doe, Jacqueline A.	222-22-2222	GS-856

4. SYSTEM/SUBSYSTEM/EQUIPMENT							
5. CONCEPTS QUALIFYING METHOD 1/							
6. DATE QUALIFIED							
7. INITIALS		No	Data	Entered	In		
8. PERFORMANCE QUALIFYING METHOD 1/							
9. DATE QUALIFIED		Blocks	4	Thru	14		
10. INITIALS							
11. DATE CERTIFICATION AUTHORITY AQUIRED 2/							
12. DATE CERTIFICATION AUTHORITY REVOKED 2/							
13.							
14.							

15. CHANGE OF STATION, ANNUAL REVIEW AND VALIDATION RECORD

EMPLOYEE DUTY STATION	DATE OF ACTION	REMARKS 3/	AP ADM. OFFICIAL SIGNATURE	AP ADM. OFFICIAL RTG. SYM.
MGM SFO	4/12/79	Entered on duty	Jack G. Smith	MGM AFS
MGM SFO	2/5/80	Annual Review	Jack G. Smith	MGM AFS
MGM SFO	2/16/81	Annual Review	Jack G. Smith	MGM AFS
MGM SFO	2/26/82	Annual Review	Jack G. Smith	MGM AFS
MGM SFO	2/8/83	Annual Review	Jack G. Smith	MGM AFS
MGM SFO	2/2/84	Annual Review	Jack G. Smith	MGM AFS
MGM SFO	2/22/85	Annual Review	R.M. Green Acting Sector Mgr.	MGM AFS
MGM SFO	2/3/86	Annual Review	Jack G. Smith	MGM AFS
MGM SFO	3/5/87	Annual Review	R.M. Green Acting Sector Mgr.	MGM AFS
MGM SFO	4/4/88	Annual Review	Jack G. Smith	MGM AFS

FAA Form 3400-3 (8-78)

APPENDIX 1. LISTING OF FORMS (CONTINUED)

FIGURE 2. INSTRUCTIONS FOR PREPARING FAA FORM 3400-3, AF PERSONNEL CERTIFICATION AND RELATED TRAINING RECORD

1. Technician's name (last, first, and middle initial).

2. Technician's social security number.

3. Technician's occupational series (for example, GS-855, GS-856, WG-4742, WG-4749, contractor, non-Federal, etc.). The grade level shall not be used.

4. The standard acronym for the specific type of service/system/subsystem/ equipment on which the technician is qualified, or in the process of qualifying, for certification authority. Temporary or interim certification shall be indicated by the appropriate letter "T" or "I" enclosed in parentheses.

5. Method by which system theory requirements were met.

6. Date technician successfully completed system theory requirements.

7. Initials of the sector manager or designated responsible official may be typed or printed only if records are being updated.

8. Method by which performance requirements were met. If performance requirements are met by experience, the beginning and ending dates shall be shown.

9. Date technician successfully completed performance requirements.

10. Initials of the sector manager or designated responsible official may be typed or printed if only records are being updated.

11. The date the certification authority is granted.

12. The date certification authority is revoked.

13. Leave blank.

14. Leave blank.

15. The technician's current duty station (for example, MEM AFS), date of the action, description of the action (for example, specific authority issued/ terminated/revoked), written signature of sector manager and routing symbol of the sector manager.

a. Administrative actions, relating to the employee's certification authorization.

b. Enter the employee's current duty station (for contractor and non-Federal technicians use sector cost code), the date, the reviewing official's signature and routing symbol. Denote type of action in the "REMARKS" column.

16. Use this section to record all training and examination results.

APPENDIX 1. LISTING OF FORMS (CONTINUED)

FIGURE 2-1. SAMPLE FAA FORM 3400-3 FOR CERTIFICATION

Page no. 1

AF PERSONNEL CERTIFICATION AND RELATED TRAINING RECORD

1. EMPLOYEE'S NAME	2. SOCIAL SECURITY NUMBER	3. SERIES (00) OR GS
Doe, Jacqueline A.	222-22-2222	GS-856

4. SYSTEM/SUBSYSTEM/EQUIPMENT	ATCT	MCR/MAC	(I) ATIS/1000	ATIS/1000	(T) MCR/5000	ASR/8	(I) TARS
5. CONCEPTS QUALIFYING METHOD 1/	RTRN	CEXAM	CEXAM	CEXAM	CEXAM	RTRN	RTRN
6. DATE QUALIFIED	7/10/79	1/14/80	1/14/80	1/14/80	1/14/80	8/23/88	8/23/88
7. INITIALS	BJC	BJC	BJC	BJC	BJC	BJC	BJC
8. PERFORMANCE QUALIFYING METHOD 1/	PEXAM	PEXAM	EXP	EXP	EXP	PEXAM	EXP
9. DATE QUALIFIED	9/25/79	1/25/80	1/80-8/85 8/13/85	8/85-9/86 9/28/86	1/80-10/87 10/15/87	9/26/88	
10. INITIALS	BJC	BJC	BJC	BJC	BJC	BJC	BJC
11. DATE CERTIFICATION AUTHORITY AQUIRED 2/	10/11/79	3/25/80	8/13/85	9/28/86	10/15/87	9/27/88	9/27/88
12. DATE CERTIFICATION AUTHORITY REVOKED 2/			9/28/86		1/13/88		
13.							
14.							

15. CHANGE OF STATION, ANNUAL REVIEW AND VALIDATION RECORD

EMPLOYEE DUTY STATION	DATE OF ACTION	REMARKS 3/	AF ADM. OFFICIAL SIGNATURE	AF ADM. OFFICIAL ORG. SYM.
MGM SFO	10/11/79	Certification authority granted for ATCT	Jack G. Smith	MGM AFS
MGM SFO	3/25/80	Certification authority granted for MCR/MAC	Jack G. Smith	MGM AFS
MGM SFO	8/13/85	Interim certification authority granted for ATIS/1000.	R. M. Glen Acting Sector Mgr.	MGM AFS
MGM SFO	9/28/86	Converted Interim ATIS/1000 cert. Authority to regular certification authority.	Jack G. Smith	MGM AFS
MGM SFO	10/15/87	Temporary certification authority granted for MCR/5000 NTE 90 days	Jack G. Smith	MGM AFS
MGM SFO	9/27/88	Certification authority granted for ASR-8 and TARS	Jack G. Smith	MGM AFS

FAA Form 3400-3 (3-79)

APPENDIX 1. LISTING OF FORMS (CONTINUED)

FIGURE 2-1. SAMPLE FAA FORM 3400-3 FOR CERTIFICATION (CONTINUED)

16. RECORD OF RELATED TRAINING AND EXAMINATION RESULTS

SYSTEM/ SUBSYSTEM/ EQUIPMENT	COURSE NUMBER	TRAINING OR EXAMINATION				REMARKS	INITIALS
		TYPE 1/	NUMBER	RESULTS 5/	DATE COMPLETED		
Found. Math	44502			P	1/18/78		BJC
Math	44504			P	10/30/78		BJC
Digital Logic	44411			P	3/1/79		BJC
Solid State Dev	44509			P	4/3/79		BJC
Comm Equip	40007	C		P	7/10/79		BJC
ATCT		P	CP-26 88537	P	9/25/79		BJC
Recorders		C	C-2 88007	P	1/14/80		BJC
TR-1720 Recorders		P	CP-31 88542	P	1/25/80		BJC
ASR-8	40333	C		P	8/23/88		BJC
ASR-8		P	RP-48 88858	P	9/26/88		BJC

NOTES: Instructions for completing this form are in Order 3400.3 E.

1/ ATRN = Resident Training PEXAM = Performance Examination EXP = Experience
CEXAM = Concepts Examination PC = Prior Certification NTRN = Non Resident Training

2/ If other than regular certification, enter (I) for Interim or (T) for Temporary in the "System or Subsystem" block 4.

3/ Denote type of action in the "Remarks" column.

4/ Enter "C" if pertaining to Concepts or "P" if pertaining to Performance.

5/ Enter "P" for Passed or "F" Failed.

APPENDIX 1. LISTING OF FORMS (CONTINUED)

FIGURE 3. INSTRUCTIONS FOR PREPARING FAA FORM 3400-5, CERTIFICATION RESPONSIBILITY

1. The use of Certification Responsibility, FAA Form 3400-5, or automated FAA Form 3400-5, is mandatory when certification responsibility is assigned to an FAA technician or FAA contract technician.

2. In Column 1, show the type of service/facility/equipment for which certification responsibility is assigned (for example, ASR, GS, LOC, VASI, ATCT, TARS, TRAD, TSEC).

3. Column 2 is used for the official 3 or 4 letter station identifier for the service/facility/equipment identified in Column 1 (for example, MEM, LAX, ATL, QN3, MIAB).

4. Column 3, is used to record the standard certification acronym required for the service/system/subsystem/equipment identified in columns 1 and 2 (for example, ASR/8, ATIS/1000, GSCE/1D, MCR/MAG, etc.).

5. Column 4 should be one of those on the back of the form that best describes the certification responsibilities assigned to the technician.

6. Column 5 shall show the effective starting dates of the certification responsibility assignments for the service/system/subsystem/equipment identified in Columns 1 and 2.

7. Column 6 shall show the dates the certification responsibility assignments are terminated, no matter the reason. An appropriate entry should be made in Column 7 to explain why the assignments have been withdrawn. If any additional remarks are required, these shall be inserted on the back of the form in the space indicated.

8. Column 7 will normally show "none" if there are no restrictions. It may show "facility decommissioned" as a comment for termination of the responsibility. In other cases it may reflect "see remarks."

9. Remarks area: Remarks shall be pertinent to the certification responsibility assigned. For example, full system certification (FC) responsibility is authorized when officially detailed to the higher grade position.

10. FAA Form 3400-5 shall be used for all certification responsibility. When it is the practice of a sector to rotate personnel through various assignments periodically, there need be only one entry for each system, facility, or equipment with the date responsibility was assigned clearly recorded. Additional entries are required only for changes in the level of the certification responsibility (for example, from SSC to FC) or new certification responsibilities.

APPENDIX 1. LISTING OF FORMS (CONTINUED)

FIGURE 3-1. SAMPLE FAA FORM 3400-5

CERTIFICATION RESPONSIBILITY	TYPE ("X" one)		PAGE NO. 1
		INITIAL ASSIGNMENT?	
	X	REVISION NO. 1	DATE 10/5/88
		REVOCATION	

To: (Employee name)	LOCATION	POSITION DESCRIPTION NO.
Doe, Jacqueline A.	Sector Field Office Montgomery, AL	SO-A999

As recorded on your FAA Form 3400-3 AF Personnel Certification and Related Training Record, you have demonstrated your proficiency on the equipment listed and are hereby assigned certification responsibility for this equipment. The kinds and levels of responsibility delegated to you are shown by code designations which are explained on the reverse side of this form. If you have any questions concerning these responsibilities, contact

IMMEDIATE SUPERVISOR: John W. Jones

LOCATION/TELEPHONE NO.: Montgomery, AL FTS 534-8888

SYSTEM/FACILITY/EQUIPMENT				EFFECTIVE DATES		COMMENTS (If "None," so state. If insufficient space, refer to special instructions on reverse of form.)
TYPE	IDENT OR LOCATION	CERTIFICATION ACRONYM	CERTIFICATION RESPONSIBILITY	STARTING	ENDING	
ATCT	MGM	ATCT	FC	11/5/79		None
MCR	MGM	MCR/MAG	FC	4/10/80		None
MCR	MXF	MCR/MAG	FC	4/10/80		None
ATIS	MGM	ATIS/1000	FC	8/20/86		None
ASR	MXF	ASR/8	FC	10/5/88		See Remarks 1
TARS	MXF		FC	10/5/88		None

Special Instructions/Restrictions/Limitations/Remarks

1. Employee is limited to subsystem (SSC) certification responsibility except when detailed to a higher grade position.

I understand the nature and scope of the responsibilities assigned in this document.

EMPLOYEE SIGNATURE AND TITLE (Type and signed)
Jacqueline A. Doe — Electronics Technician

IMMEDIATE SUPERVISOR SIGNATURE AND TITLE (Type and signed)
John W. Jones — Manager, SFO

SECTOR MANAGER SIGNATURE AND TITLE (Type and signed)
Jack L. Smith — Manager, AFS

FAA Form 3400-5 SUPERSEDES PREVIOUS EDITION

APPENDIX 1. LISTING OF FORMS (CONTINUED)

FIGURE 3-1. SAMPLE FAA FORM 3400-5 (CONTINUED)

CODE DESIGNATIONS

CERTIFICATION RESPONSIBILITY

PC - Full certification responsibility for complete system.

PIC - Full installation certification responsibility.

LC - Limited certification responsibility-subject to listed limitations.

LIC - Limited installation certification responsibility-subject to listed limitations.

NCR - No certification responsibility.

SSC - Subsystem certification responsibility-limited to listed equipment.

CC ("X")	☐ AMPS	☐ WATCH SPVR OR SE	☐ UNIT SPVR	☐ OTHER (Specify)	☐ FILE

APPENDIX 1. LISTING OF FORMS (CONTINUED)

FIGURE 4. INSTRUCTIONS FOR PREPARING FAA FORM 3400-6, CERTIFICATION AUTHORITY REQUIREMENTS AGREEMENT

1. The Certification Authority Requirements Agreement contains the following information:

a. The reason for the requirement.

b. List of certification authorities required.

1/c. List of training required.

d. List of examinations required.

e. List of OJT required.

f. Conditions.

g. Employee's acknowledgement.

h. Time allowed for completion.

i. Signatures of the employee, supervisor, and sector manager.

2. The supervisor must prepare and attach a detailed training plan on FAA Form 3000-14 that lists in order all of the requirements and a realistic scheduled completion date for each item. In preparing the training plan, the supervisor should check the following:

a. FAA catalog of training for courses, hours required, and prerequisites.

b. Order 3400.3 for available examinations, hours required, and prerequisites.

c. Sector assistant manager for program support (AMPS) for available training quota and dates.

d. The amount of duty time that will be permitted for study.

3. A copy of the agreement and training plan must be given to the employee. Any changes/revisions to the certification authority requirements agreement must be in writing and attached to the original agreement and a copy given to the employee.

1/ NOTE: List either the resident training course or the theory of operation (concepts) requirement, but not both on the FAA Form 3400-6. If the training method is optional, it must be stated in the remarks section on FAA Form 3000-14.

APPENDIX 1. LISTING OF FORMS (CONTINUED)

FIGURE 4-1. SAMPLE FAA FORM 3400-6

AIRWAY FACILITIES PERSONNEL
CERTIFICATION PROGRAM

CERTIFICATION AUTHORITY REQUIREMENTS AGREEMENT

NAME (Last, First, MI, Typed)	POSITION TITLE
Newcomer, Henry T.	Electronic Technician
ORGANIZATIONAL UNIT AND LOCATION	SERIES AND GRADE
	GS-856-11
Airway Facilities Sector Bismark, North Dakota	DATE
	July 18, 1984

I acknowledge the requirement to obtain certification authority under the provisions of the Airway Facilities Personnel Certification Program on the systems/subsystems/equipment listed below for the following reason(s) ("X" appropriate box(es) below.)

- ☐ New airway facilities employee
- ☐ Workload adjustment to satisfy operational need *(added duties)*
- ☐ Other *(Explain)*
- ☐ Change in equipment requiring new authority
- ☒ Reassignment or selection to a new position or location

SYSTEMS/SUBSYSTEMS/EQUIPMENT

Localizer, Mark-1F
Glide Slope, Mark-1F, Null Reference
Marker, Mark-1F
RVR, Tasker-500

TRAINING

RESIDENT

Localizer, Mark- 1F, 47702 (CBI)
Glide Slope, Mark-1F, 47703 (CBI)
Marker, Mark-1F, 47705 (CBI)
RVR, Tasker-500, 40252

NON-RESIDENT

TRAINING COMPLETION TARGET DATE → 2/1/85

CERTIFICATION EXAMINATIONS

CONCEPTS

PERFORMANCE

WP-33 ILS Mark-1F, LOC, GS, Marker
CP-28 RVR, Tasker-500

FAA Form 3400-6 (3-78) SUPERSEDES PREVIOUS EDITION

APPENDIX 1. LISTING OF FORMS (CONTINUED)

FIGURE 4-1. SAMPLE FAA FORM 3400-6 (CONTINUED)

OTHER REQUIREMENTS

OJT WORK ASSIGNMENTS, ETC

Informal OJT to prepare for Performance Examinations.

1. Localizer
2. Glide Slope
3. Marker
4. RVR

CONDITIONS

1. The training and certification examination requirements listed are to be satisfactorily completed
2. Time extensions on any of the listed requirements are at the discretion of the sector manager. It is expected that extensions will be granted if delays are beyond the control of the employee. In the event resident training is not available, the employee is expected to complete the appropriate concepts examinations within the time frame specified
3. Training and study time for completion of this agreement will be permitted in accordance with agency policy
4. Retakes of examinations will be in accordance with the current version of Order 3400.3, Airway Facilities Personnel Certification Program.
5. The employee's continued assignment to the position will be contingent upon satisfactory completion of the requirements listed in this agreement within the time frame specified.

EMPLOYEE ACKNOWLEDGEMENT

I have reviewed this requirement, as specified in the Airway Facilities Certification Program Directives, and acknowledge that I will be allowed the number of months shown to complete the prescribed training and examinations and to obtain certification authority. Should I fail to obtain the listed certification authority by that time, I understand that I cannot be retained in this position.

NO. MONTHS: 8

EMPLOYEE'S SIGNATURE	DATE

IMMEDIATE SUPERVISOR

Successful completion of the training and certification requirements listed above will technically qualify the above named employee for the required certification authority.

IMMEDIATE SUPERVISOR'S SIGNATURE	DATE

SECTOR MANAGER

The above named employee will be provided with the opportunity to acquire the prescribed training, or with the study time as indicated in Condition 3 above, to prepare for concepts and performance examinations specified to meet the certification authority requirements listed in this document.

SECTOR MANAGER'S SIGNATURE	DATE

COPY DISTRIBUTION

"X" APPROPRIATE BOX

CC: ☐ EMPLOYEE ☐ SUPERVISOR ☐ SECTOR MANAGER

APPENDIX 1. LISTING OF FORMS (CONTINUED)

FIGURE 5. SAMPLE FAA FORM 3000-14 AS ATTACHMENT TO FAA FORM 3400-6

Airways Facilities Training Plan

Name	Location
Newcomer, Henry T.	AFS, Bismark, North Dakota
Title/Grade	**Date**
Electronics Technician, GS-11	July 18, 1984

Subject/Course	Completion Date	
	Schedule	Actual
Localizer, Mark-1F, Course 47702	9/1/84	
Glide Slope, Mark-1F, Course 47703	9/9/84	
Marker, Mark-1F, Course 47705	9/15/84	
OJT on LOC, GS and Markers	10/10/84	
NP-33, Performance Examination on LOC, GS & Markers	10/20/84	
RVR, Tasker-500, Course 40252 or C-15 Theory of Operation Examination	2/1/85	
OJT on RVR	2/20/85	
CP-28, Performance Examination on RVR	2/25/85	

I acknowledge that a review of this training plan has been accomplished as required by the Airway Facilities Technical Training Program.

Employee's Signature and Date	Supervisor's Signature and Date

Remarks: THIS TRAINING PLAN OUTLINES THE TRAINING AND EXAMINATIONS NECESSARY TO FULFILL THE REQUIREMENTS OF THE CERTIFICATION AUTHORITY REQUIREMENTS AGREEMENTS, FAA FORM 3400-6 DATED 7/18/84. THE EMPLOYEE MAY TAKE THE THEORY OF OPERATION EXAMINATION IN LIEU OF RESIDENT TRAINING FOR THE RVR PROVIDED IT IS SUCCESSFULLY COMPLETED NOT LATER THAN 125/84.

FAA Form 3000-14 (1-84)

APPENDIX 2. AUTOMATION DATA FIELDS

FIGURE 1. PERSONNEL CERTIFICATION AND TRAINING AUTOMATION DATA FIELDS

The data fields in this table were developed using the preliminary requirements for the maintenance management system (MMS) as identified in report UNISYS/TSC-88-0030-000-01, dated November 1988, and UNISYS/TSC-88-0030-000-02 MMS PCT Requirements Review, dated August 1989. These data fields should be used to the extent possible when developing automated personnel certification databases. This will reduce the workload in converting the data for use in MMS. Existing databases are exempt from this requirement; however, future changes or additions should comply with the MMS requirements.

Field Description	Field Length
SSE Type (System/Subsystem/Equipment)	5
SSE Ident	4
SSE Shortname	8
SSE Equipment ID	6
Cost Center Code (CCC)	6
SSN	9
Certification Acronym	10 (From Appendix 5, Figure
1) Facility Type	10 (From FMF if Available, otherwise use acronym)
Location ID	4 (MEM, MEMA, etc.)
Position description number	10
Date certification responsibility begins	6 (YYMMDD)
Date certification responsibility ends	6 (YYMMDD)
Type responsibility	4 (FC, SSC, etc.)
Date qualified for theory	6 (YYMMDD)
Theory qualifying method	5 (RTRN, CEXAM, etc.)
Initials of theory verifier	3
Date certification authority granted	6 (YYMMDD)
Type authority granted	1 (R=Reg., I=Interim, T=Temp.)
Date authority revoked	6 (YYMMDD)
Reason authority revoked	1 (E=Expired (Where T or I)
Date experience commenced	6 (YYMMDD)
Date experience completed	6 (YYMMDD)
Performance qualification method	5 (PEXAM, EXP, etc.)
Date performance qualified	6 (YYMMDD)
Initials of perf. examiner	3
3400-5 remarks	22
Course or exam ID (theory)	8
Course or exam ID (performance)	8
Last name	15
First name	15
Grade - series	10
Duty location	30
Immediate supervisor	15
Home phone number	12

APPENDIX 2. AUTOMATION DATA FIELDS (CONTINUED)

FIGURE 1. PERSONNEL CERTIFICATION AND TRAINING AUTOMATION DATA FIELDS (CONTINUED)

Field Description	Field Length
Limitations/restrictions	48
Address	30
City	20
State	2
Zip	10
Routing symbol	5
Date of review	6 (YYMMDD)

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS

This appendix lists the following tables in association with certification examinations in the personnel certification program.

1. Figure 1. Concept Examination Equivalent Training/Examinations.
2. Figure 2. Current Concept/Theory-of-Operation Examinations.
3. Figure 3. Current Performance Examinations.
4. Figure 4. Previous Concept/Theory-of-Operation Examinations.
5. Figure 5. Previous Performance Examinations.

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 1. Concept Examination Equivalent Training/Examinations

CONCEPT EXAM NUMBER	PMIS NUMBER	CONCEPT EXAMINATION TITLE	EQUIVALENT COURSE/EXAM	EQUIVALENT COURSE OR EXAMINATION TITLE	AREA
C1	BB000	COMMUNICATIONS EQUIPMENT	a 40001	COMMUNICATIONS EQUIPMENT	COM
			b 40007	COMMUNICATIONS EQUIPMENT	COM
			c 40029	(CBI) COMMUNICATIONS EQUIPMENT	COM
			d 47502	(CBI) COMMUNICATIONS EQUIPMENT	COM
			e FC100	COMMUNICATIONS EQUIPMENT	COM
C2	BB007	RECORDERS	a 40001	COMM. EQUIP. WITH RECORDERS	COM
			b 44002	MULTI-CHANNEL RECORDERS	COM
			c 44006	NCR DIRECTED STUDY COURSE	COM
			d 45003	MULTICHANNEL RECORDERS	COM
			e BB003	CONCEPT EXAM C1-R	COM
			f FC160	MULTI-CHANNEL RECORDERS	COM
C3	BB008	RVR (IRA)	a 40209	RVR	COM
			b 40229	RVR EQUIP. (IRA SYSTEM)	COM
			c FC198	RVR	COM
C4	BB009	RVV	a 40209	RVR	COM
			b 40213	RVR (FA-7861)	COM
			c 40229	RVR EQUIP. (IRA SYSTEM)	COM
			d 40252	RVR EQUIP. (TASK 500)	COM
			e FC198	RVR	COM
C5	BB010	RBC	a 46013	OAT ROTATING BEAM CEILOMETER	COM
C6	BB011	UVDF (DOPPLER)	a	M5 PLUS M5D EXAMS, SUPERSEDED	COM
			b 40210	UVDF (DOPPLER)	COM
			c 40225	UVDF (DOPPLER)	COM
			d BB213	CONCEPT EXAM M6	COM
			e FC145	UVDF (DOPPLER)	COM
C6-R	BB012	UVDF (DOPPLER) REMOTE EQUIP.	a 40227	UHF/VHF DF REMOTING EQUIPMENT	COM
C8	BB014	RVR (SSR, FA-7861, TASKER-400)	a 40213	RVR, TYPE FA-7861	COM
			b FC199	RVR	COM
C10	BB016	BUEC REMOTE SITE	a 40008	BUEC REMOTE SITE	COM
			b 40027	(CBI) BUEC SYSTEM, REMOTE SITE	COM
			c 47500	(CBI) BUEC SYSTEM, REMOTE SITE	COM

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 1. Concept Examination Equivalent Training/Examinations (Continued)

CONCEPT EXAM NUMBER	PMIS NUMBER	CONCEPT EXAMINATION TITLE	EQUIVALENT COURSE/EXAM	EQUIVALENT COURSE OR EXAM TITLE	AREA
C11	88017	BUEC, ARTCC	a 40009	BUEC SYSTEM, ARTCC SITE	COM
			c 40027	BUEC REMOTE SITE	COM
			d 40028	(CBI) BUEC SYSTEM, ARTCC SITE	COM
			e 47501	(CBI) BUEC SYSTEM, ARTCC SITE	COM
C12	88018	HIGH CAPACITY VOICE RECORDER	a 40016	HIGH CAPACITY VOICE RECORDER	COM
			b 45005	HIGH CAPACITY VOICE RECORDER	COM
C15A	88022	RVR, TASKER-500 (COMPUTER ONLY)	a 40252	RUNWAY VISUAL RANGE EQUIP. (TASKER)	COM
C16	88023	LLWAS, FA-9980/FA-9981	a 40265	LLWAS, FA-9980	COM
			b 40266	FA-9981 LLWAS	COM
			c 40268	LLWAS (FA-9980/FA-9981	COM
			d 48118	OAT FA-9980 LLWAS	COM
			e 48130	OAT FA-9980 LLWAS	COM
C17	88024	VHF DF (FA-9964)	a 40257	SOLID STATE DF MODEL FA-9964	COM
E1	88100	ELECTRICAL PRINCIPLES	a ANY RESIDENT ELECTRONICS COURSE		ENV
			b 40100	ELECTRICAL PRINCIPLES, PHASE-I	ENV
			c 40135	(CBI) ELECTRICAL PRINCIPLES	ENV
			d 44106	AIR CONDITIONING	ENV
			e 47600	(CBI) ELECTRICAL PRINCIPLES	ENV
			f DFE-1	BASIC ELECTRICITY	ENV
			g DFE-21	FACILITY ELECTRICAL SYSTEMS	ENV
			h FC220	ELECTRICAL PRINCIPLES	ENV
E3	88103	MALS/RAIL/REIL	a 40123	VISUAL LANDING AIDS	ENV
			b 40136	(CBI) MALS/RAIL/REIL	ENV
			c 47601	(CBI) MALS/RAIL/REIL	ENV
			d 88101	CONCEPT EXAM E1-V, VNAS	ENV
E4	88104	ALS	a 40106	VNAS	ENV
			b 40124	APPROACH LIGHT SYSTEMS	ENV
			c 40137	(CBI) APPROACH LIGHT SYSTEMS	ENV
			d 47602	(CBI) APPROACH LIGHT SYSTEMS	ENV
			e 88101	CONCEPT EXAM E1-V VNAS	ENV
E5	88105	VASI	a 40123	VISUAL LANDING AIDS	ENV
			b 40125	VISUAL APPROACH SLOPE INDICATOR	ENV
			c 40138	(CBI) VASI	ENV
			d 47603	(CBI) VASI	ENV
			e 88101	CONCEPT EXAM E1-V, VNAS	ENV

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 1. Concept Examination Equivalent Training/Examinations (Continued)

CONCEPT EXAM NUMBER	PMIS NUMBER	CONCEPT EXAMINATION TITLE	EQUIVALENT COURSE/EXAM	EQUIVALENT COURSE OR EXAM TITLE	AREA
E6	88106	ELECTRICAL PRINCIPLES, PHASE-II	a 40115	SOLID STATE FUNDAMENTAL FOR ELECTRONICS	ENV
			b 40117	ESS CONCEPTS	ENV
			c 40126	ELECTRICAL PRINCIPLES, PHASE-II	ENV
			d 40135	(CBI) ELECTRICAL PRINCIPLES	ENV
			e 47600	(CBI) ELECTRICAL PRINCIPLES	ENV
E8	88108	EXIDE UPS	a 40149	EXIDE PCS MAINTENANCE	ENV
			b 48152	EXIDE PCS MAINTENANCE	ENV
N4	88208	MARKERS/HOMERS	a 40001	COMMUNICATIONS EQUIPMENT	NAV
			b 40007	COMMUNICATIONS EQUIPMENT	NAV
			c 40200	RHO-THETA (TACAN) PRINCIPLES	NAV
			d 40204	ADVANCED ILS/VOR PRINCIPLES	NAV
			e 40205	VHF OMNIRANGE (VOR)	NAV
			f 40234	ILS, TUBE TYPE	NAV
N10	88217	VOT ONLY	a 40205	VHF OMNIRANGE (VOR)	NAV
N11	88218	VOR/VOT	a 40205	VHF OMNIRANGE (VOR)	NAV
			b 88200	CONCEPT EXAM N1	NAV
			c FV200	VHF OMNIRANGE, VOR	NAV
N12	88219	ILS/VOR PRINCIPLES	a 40204	ADVANCED ILS/VOR PRINCIPLES	NAV
			b 47201	(CBI) COMMON PRIN., VOR/TACAN/DME	NAV
			c 88200	CONCEPT EXAM N1	NAV
			d 89229	CONCEPT EXAM N22	NAV
N13	88220	ILS CONCEPTS	a 40206	ILS	NAV
			b 40218	ILS	NAV
			c 40233	ILS CONCEPTS	NAV
			d 47200	ILS COMMON PRINCIPLES	NAV
			e 88204	CONCEPTS EXAM N3	NAV
			f FV300	ILS	NAV
N14	88221	ILS, TUBE TYPE	a 40206	ILS	NAV
			b 40218	ILS	NAV
			c 40234	ILS, TUBE TYPE	NAV
			d 41512	ILS, TUBE TYPE	NAV
			e 88204	CONCEPT EXAM N3	NAV
			f FV300	ILS	NAV

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 1. Concept Examination Equivalent Training/Examinations (Continued)

CONCEPT EXAM NUMBER	PMIS NUMBER	CONCEPT EXAMINATION TITLE	EQUIVALENT COURSE/EXAM	EQUIVALENT COURSE OR EXAM TITLE	ARE
M15	88222	ILS, WILCOX MARK 1A/1C	a 40216	WILCOX MARK 1 ILS	NAV
			b 40223	WILCOX MARK 1 ILS	NAV
			c 40235	ILS, WILCOX MARK 1A	NAV
			d FV320	WILCOX MARK 1 ILS	NAV
M16	88223	ILS, AIL MARK 1B	a 40211	ILS AIL	NAV
			b 40236	ILS, AIL MARK 1B	NAV
			c 40617	AIL/MARK 1B ILS	NAV
			d FV325	AIL ILS	NAV
M17	88224	ILS, GRN-27 (CATEGORY II)	a 40232	AN/GRN-27 CATEGORY II ILS	NAV
M19	88226	DME, BUTLER	a 48094	DME, BUTLER 1020/WILCOX 595/596	NAV
M20	88227	CAPTURE EFFECT GLIDE SLOPE	a 40240	CAPTURE EFFECT GLIDE SLOPE	NAV
			b 88205	CONCEPT EXAM M3-C	NAV
M21	88228	ILS, AIL TYPE 55/MARK 1B	a 40236	ILS, AIL MARK 1B	NAV
M26	88233	DME, CARDION, FA-8974	a 40231	DME, CARDION, FA-8974	NAV
M27	88234	ILS, MARK 1D/E/F LOCALIZER	a 41504	MARK 1D, LOCALIZER	NAV
			b 47702	(CBI) MARK 1D/E/F, LOCALIZER	NAV
			c 48086	OAT WILCOX MARK 1D/E ILS	NAV
M28	88235	ILS, MARK 1D/E/F GLIDE SLOPE	a 41523	MARK 1D, NULL REF. GLIDE SLOPE	NAV
			b 47703	(CBI) MARK 1D/E/F NULL-REF. GSLOPE	NAV
			c 48086	OAT WILCOX MARK 1D/E ILS	NAV
M29	88236	ILS, MARK 1D/E/F MARKER BEACON	a 41579	MARK 1D, ILS MARKER BEACON	NAV
			b 47705	(CBI) MARK 1D/E/F MARKER BEACON	NAV
			c 48086	OAT WILCOX MARK 1D/E ILS	NAV
M30	88237	ILS, MARK 1D REMOTE MON. EQUIP.	a 41563	MARK 1D, REMOTE MONITORING EQUIP.	NAV
			b 47704	(CBI) MARK 1D REMOTE MONITOR EQUIP.	NAV
			c 48086	OAT WILCOX MARK 1D/E ILS	NAV
M31	88238	DME, CARDION, FA-9639	a 40238	DME TYPE FA-8974/FA-9639	NAV
			b FB100	TACAN, PRIN/GRN-9/RTC-1	NAV

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 1. Concept Examination Equivalent Training/Examinations (Continued)

CONCEPT EXAM NUMBER	PMIS NUMBER	CONCEPT EXAMINATION TITLE	EQUIVALENT COURSE/EXAM	EQUIVALENT COURSE OR EXAM TITLE	AREA
N32	88239	RHO-THETA CONTROL (RTC-1)	a 44214	RHO-THETA NAV. EQUIP. RTC-1;	NAV
N33	88240	ILS, S.B. REF. GS (TT)	a 41558	TUBE TYPE SIDEBAND REFERENCE GS	NAV
N34	88241	CARDION SS VOR (FA-9467)	a 40230	SS TRANSMITTER ASSEMBLY, FA-9467	NAV
N35	88242	2ND GEN VORTAC (FA-9996)	a 40262	2ND GENERATION VORTAC HARDWARE	NAV
			b 47701	(CBI) 2ND GEN. VORTAC HARDWARE	NAV
			c 48124	OAT 2ND GEN. VORTAC HARDWARE	NAV
N36	88243	CARDION DME (FA-9783)	a 40260	CARDION DME, FA-9783	NAV
			b 40271	(CBI) DME (FA-9783)	NAV
			c 47700	(CBI) DME (FA-9783)	NAV
N38	88245	ILS COMMON PRINCIPLES	a 47200	(CBI) COMMON PRINCIPLES, ILS	NAV
N39	88246	VOT/TAC/DME COMMON PRINCIPLES	a 44215	DME PRINCIPLES	NAV
			b 47201	(CBI) COMMON PRIN., VOR/TACAN/DME	NAV
			c 88215	CONCEPT EXAM N2	NAV
			d FD200	TACAN PRINCIPLES	NAV
N40	88247	DOUBLE S.B. DOPPLER VOR	a 40261	DOPPLER VOR (DVOR)	NAV
			b 48022	OAT DOPPLER VOR SYSTEM (DVOR)	NAV
R5	88309	RMLR-1A/2/3/4 COMMON EQUIP.	a 40301	RMLR 1/2/3/4	RAD
			b 40302	RMLR 1/2/3/4	RAD
			c 40320	RMLR 1/2/3/4	RAD
			d 40322	RML-1/2/3/4 (RML-T/R)	RAD
			e 45304	RML-12/3/4 T/R COMMON EQUIPMENT	RAD
			f 45305	RML-1/2/3/4 TERMINAL EQUIPMENT	RAD
			g FR301	RMLR 1/2/3/4	RAD
			h FR303	RMLR 1/2/3/4	RAD
R6	88310	RBDE ONLY (3/4/5)	a	CONCEPT EXAMS R10 PLUS R1-D	RAD
			b	CONCEPT EXAMS R1 PLUS R1-D	RAD
			c 40309	RADAR BRIGHT DISPLAY EQ., RBDE-5	RAD
			d 40341	RBDE ONLY 3/4/5	RAD
			e 88307	CONCEPT EXAM R3	RAD
			f FR525	RBDE ONLY 3/4/5	RAD

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 1. Concept Examination Equivalent Training/Examinations (Continued)

CONCEPT EXAM NUMBER	PMIS NUMBER	CONCEPT EXAMINATION TITLE	EQUIVALENT COURSE/EXAM	EQUIVALENT COURSE OR EXAM TITLE	AREA
R7	88311	SECRA INDICATOR ONLY	a 40312	ATCBI-3 INDICATOR	RAD
			b 40316	ATCBI-3 INDICATOR	RAD
			c 45310	ATCBI-3 INDICATOR	RAD
			d 45312	ATCBI-3 INDICATOR	RAD
			e	CONCEPT EXAM R2	RAD
			f FR527	ATCBI-3 INDICATOR	RAD
R9	88313	BRITE-1	a 40311	BRITE-1	RAD
			b 40327	BRITE-2/4	RAD
			c 88305	CONCEPT EXAM R1-T	RAD
R10	88314	RADAR PRINCIPLES A	a 40300	RADAR	RAD
			b 40329	RADAR PRINCIPLES A	RAD
			c 47000	(CBI) COMMON PRINCIPLES, BASIC	RAD
			d 88300	CONCEPT EXAM R1	RAD
			e FR200	BASIC RADAR	RAD
R11	88315	RADAR PRINCIPLES B	a 40268	(CBI) COMMON PRINCIPLES, BASIC	RAD
			b 40300	RADAR	RAD
			c 40330	RADAR PRINCIPLES B	RAD
			d 44300	RADAR TECH.	RAD
			e 47300	(CBI) COMMON PRINCIPLES, RADAR	RAD
			f 88300	CONCEPT EXAM R1	RAD
			g FR200	BASIC RADAR	RAD
R12	88316	RBDE-6 SCAN CONVERTER	a 40324	RADAR BRIGHT DISPLAY EQ., RBDE-6	RAD
R13	88317	ASR-7 RADAR	a 40323	ASR-7	RAD
			b 40386	ASR RADAR SYSTEM	RAD
			c 46027	AN/GPN-12/ASR-7 RADAR	RAD
R15	88319	ATCBI-4 (DIGITAL DEFRUITER	a 40335	ATCBI-4 (DIGITAL DEFRUITER)	RAD
			b 45309	ATCBI-4	RAD
			c 88318	CONCEPT EXAM R14	RAD
R16	88320	RML-6	a 40344	RADAR MICROWAVE LINK SYSTEM, RML-6	RAD
			b 45307	RML-5/6 TERMINAL EQUIPMENT	RAD

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 1. Concept Examination Equivalent Training/Examinations (Continued)

CONCEPT EXAM NUMBER	PMIS NUMBER	CONCEPT EXAMINATION TITLE	EQUIVALENT COURSE/EXAM	EQUIVALENT COURSE OR EXAM TITLE	AREA
R24	88328	RML-6 REPEATER	a 40344	RADAR MICROWAVE LINK SYSTEM, RML-6	RAD
			b 40376	RML-6 COMMON EQUIPMENT	RAD
			c 45306	RML-6 REPEATER	RAD
			d 45307	RML-5/6 TERMINAL EQUIPMENT	RAD
R25	88329	ASR-4/5/6 TRANSMITTER SITE	a 40304	ASR-4/5/6 RADAR SYSTEM	RAD
			b 40342	ASR-4/5/6 TRANSMITTER SITE/COMM EQ.	RAD
			c 45308	ASR-4/5/6	RAD
			d 88323	CONCEPT EXAM R19	RAD
			e FR518	ASR-4/5/6 TI SITE ONLY	RAD
R26	88330	COMMON DIGITIZER (HEIGHT ONLY)	a FR410H	CD HEIGHT COURSE	RAD
			b 43404	COMMON DIGITIZER, HEIGHT	RAD
			c 43477	COMMON DIGITIZER (HEIGHT ONLY)	RAD
R27	88331	DIGITAL DEFRUITER	a 41604	DIGITAL DEFRUITER	RAD
			b 44317	DIGITAL DEFRUITER	RAD
R28	88332	TPI-42	a 40366	TPI-42	RAD
			b 46108	TPI-42	RAD
R29	88333	ARSR-1/2	a 40307	ARSR-1/2	RAD
			b 40383	ARSR-1/2	RAD
			c FR528	ARSR-1/2	RAD
R30	88334	SOLID STATE VIDEO MAPPERS	a 40328	SOLID STATE VIDEO MAPPERS	RAD
R31	88335	ATCBI-5	a 40339	ATCBI-5	RAD
			b 40383	(CBI) ATCBI-5	RAD
			c 47800	(CBI) ATCBI-5	RAD
R32	88336	ASR-8	a 40333	ASR-8	RAD
R33	88337	BRITE-2/4	a 40327	BRITE-2/4	RAD
			b 88321	CONCEPT EXAM R17	RAD

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 1. Concept Examination Equivalent Training/Examinations (Continued)

CONCEPT EXAM NUMBER	PMIS NUMBER	CONCEPT EXAMINATION TITLE	EQUIVALENT COURSE/EXAM	EQUIVALENT COURSE OR EXAM TITLE	AREA
R35	88339	RML-1/2/3/4 TERMINAL EQUIP.	a	CONCEPT EXAMS R10 + R11 + R1-L	RAD
			b 40302	RML SYSTEM, RML-1/2/3/4	RAD
			c 40322	RML-1/2/3/4 (RML-T/R)	RAD
			d 45305	RML-1/2/3/4 TERMINAL EQUIPMENT	RAD
			e 88309	CONCEPT EXAM R4	RAD
			f 88312	CONCEPT EXAM R8	RAD
			g FR503	RML SYSTEM, RML-1/2/3/4	RAD
R36	88340	BRITE NUMERICS (TPI-42)	a 40367	BRITE NUMERICS (TPI-42)	RAD
R37	88341	ARSR3 MILI. INTERFACE MODULE	a 40377	ARSR-3 MILITARY INTERFACE MOD.	RAD
R39	88343	RADAR BCN. REMOTE SYS. MONIT.	a 40378	RADAR BEACON REMOTE SYSTEM, MONITOR	RAD
			b 47802	(CBI) RADAR BCN. REMOTE SYSTEM MON.	RAD
R40	88344	ATCBI-3 (TX/RX)	a	OLD FR527A ATCBI-3 (TX/RX)	RAD
			b	OLD FR527C ATCBI-3 (TX/RX)	RAD
			c	CONCEPT EXAMS R10 + R11 + R1-B	RAD
			d	CONCEPT EXAMS R1 PLUS R1-B	RAD
			e 40312	ATCBI-3 (TX/RX)	RAD
			f 40314	ATCBI-3 (TX/RX)	RAD
			g 40318	ATCBI-3 (TX/RX/IND)	RAD
			h 45310	ATCBI-3 (TX/RX)	RAD
			i 45312	ATCBI-3 (TX/RX)	RAD
			j 88318	CONCEPT EXAM R14	RAD
R41	88345	ARSR-3	a 40331	ARSR-3	RAD
			b 40388	ARSR-3	RAD
			c 40385	ARSR-3	RAD
D2	88401	CODED TIME SOURCE	a 43001	CODED TIME SOURCE, CTS	DAT
			b 44005	CODED TIME SOURCE, CTS	DAT
			c FT180	CODED TIME SOURCE	DAT
D3	88402	PERIPHERAL DEVICES	a 43411	NAS ENROUTE I/O EQUIP. FOR TECHN.	DAT
			b 43457	PERIPHERAL DEVICES	DAT
D4	88403	DR6/IFDS	a 43417	DR6/IFDS	DAT

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 1. Concept Examination Equivalent Training/Examinations (Continued)

CONCEPT EXAM NUMBER	PMIS NUMBER	CONCEPT EXAMINATION TITLE	EQUIVALENT COURSE/EXAM	EQUIVALENT COURSE OR EXAM TITLE	AREA
D5	88404	FLHT DATA ENTRY/PRNTOUT EQ FDEP	a 43409	FLIGHT DATA ENTRY/PRINTOUT EQ (FDEP)	DAT
			b 45409	FLIGHT DATA ENTRY/PRINTOUT EQ (FDEP)	DAT
			c FP160	FLIGHT DATA ENTRY/PRINTOUT EQ (FDEP)	DAT
D6	88405	IBM 9020A PROCESSOR	a 43413	CCC FOR TECHNICIANS	DAT
			b 43461	IBM 9020A PROCESSOR	DAT
D7	88406	IBM 9020 INPT/OUTPT/(I/O) EQ.	a 43413	CCC FOR TECHNICIANS	DAT
			b 43459	IBM 9020 INPUT/OUTPUT (I/O) EQUIP.	DAT
D8	88407	DIRECT ACCESS STORAGE FACILITY	a 43437	IBM 2314-A1 DASF	DAT
D13	88412	ARTS-III SYS UPDT THEORY/OPERAT	a 42011	ARTS-IIIA SYSTEM	DAT
			b 42014	ARTS-IIIA UPDATE	DAT
D14	88413	IBM 029/129	a 43516	IBM 029/129 CARD PUNCH/PRN VERIFIER	DAT
D15	88414	SENSOR RCVR PROCESSOR (SRAP)	a 42010	SENSOR, RECEIVER & PROCESSOR	DAT
D17	88416	DTA PROC.SUB-SYS ARTSIIIA/EARTS	a	42017 IOP & 42014/ARTS-IIIA UPDATE	DAT
			b	42017 IOP & 42011/ARTS-IIIA SYSTEM	DAT
			c 42027	DATA PROCESSING SUBSYSTEMS	DAT
D18	88417	ARTS-IIIA DATA ENTRY DISPL SYS	a 42035	ARTS-IIIA DATA ENTRY DISPLAY SUBSYS	DAT
D19	88418	DATA ACQUISI. SUB/SYS/ARTS IIIA	a 42034	ARTS IIIA DATA ACQUISITION SUBSYSTEM	DAT
D22	88421	COMPUTER UPDATE EQ. (CUE)	a 43416	COMPUTER UPDATE EQUIPMENT	DAT
D23	88422	SYS.MAINT.MON.CONSOLE (SMMC)	a 43432	SYSTEM MAINT. MONITOR CONSOLE (SMMC)	DAT
D24	88423	CONTIN.DTA.RCD.SYS.(CDR)ARTSII	a	42012 CDR PLUS 42026 CDR UPDATE	DAT
			b 42025	CONTINUOUS DATA RECORDING SYS(CDR)	DAT
D25	88424	INTRFCE BUFFER ADPTER GEN IBA6	a 42024	INTERFACE BUFFER ADAPTER & GEN(IBA6)	DAT
D26	88425	EARTS DATA ACQUIS. SUB.SYS.EDAS	a 42028	EARTS DATA ACQUISITION SUB.SYS.(DAS)	DAT
D28	88427	ENRTE AUTMTD RADR TRCK SYS EARTS	a 43467	EARTS DISPLAY	DAT

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 2. Current Concept/Theory-of-Operation Examinations

EXAM NUMBER	PMIS NUMBER	EXAMINATION TITLE	PREREQUISITE EXAMS	NUMBER OF QUESTIONS	AVAILABILITY DATE	AVAILABILITY TIME	AREA
C1	88000	BASIC COMM EQUIP	PVE-44712	50	10/30/65	3.0	COM
C1-L	88001	VHF LINK	C1	25	10/30/65	1.25	COM
C1-SR	88004	IFSR	C1	15	10/30/65	0.45	COM
C1-SS	88005	IFSS	C1	15	10/30/65	0.45	COM
C1-ST	88006	IFST	C1	20	10/30/65	01.0	COM
C2	88007	RECORDERS		20	10/30/65	01.0	COM
C3	88008	RVR (IRA)		35	5/1/69	02.0	COM
C4	88009	RVV		20	1/1/71	01.0	COM
C5	88010	RBC		10	1/1/71	00.5	COM
C6	88011	UVDF (DOPPLER)	PVE-44712	40	5/1/66	02.5	COM
C6-R	88012	UVDF REMOTING EQUIP.	PVE-44712-44702	30	5/1/73	02.0	COM
C8	88014	RVR (SSR, FA-7861	TASKER 400	35	5/1/72	02.0	COM
C10	88016	BUEC REMOTE SITE	PVE-44712 & PVE-44702	50	11/1/77	03.0	COM
C11	88017	BUEC ARTCC SITE	PVE-44712, PVE-44702, & C10	33	9/4/78	02.0	COM
C12	88018	HIGH CAPACITY VOICE RECORDER	PVE-44712 & PVE-44702	40	10/5/78	02.5	COM
				25	2/14/78	01.5	COM
C13	88019	CML, FARINON		39	2/14/78	02.0	COM
C14	88020	CML MOTOROLA, MR-20		25	10/28/81	03.0	COM
C15A	88022	RVR, T500 COMPUTER ONLY	PVE-44702	25	10/6/81	01.5	COM
C16	88023	LLWAS FA-9980/9981		20	10/1/84	02.0	COM
C17	88024	VDF FA9964	PVE-44702	50	10/1/68	02.5	ENV
E1	88100	ELECTRICAL PRINCIPLES		40	10/6/78	02.0	ENV
E3	88103	MALS/RAIL/REIL	E1	50	10/6/78	04.0	ENV
E4	88104	ALS	E1 & E3	25	9/22/78	02.0	ENV
E5	88105	VASI	E1				
E6	88106	ELECTRLCAL PRINCIPLES PHASE II	E1	50	5/25/79	03.0	ENV
			E1	40	8/6/86	02.0	ENV
E8	88108	EXIDE UPS	N12, N13, & N14	10	10/30/65	0.45	NAV
N3-W	88207	WAVEGUIDE LOC. (TUBE)		25	10/4/65	01.0	NAV
N4	88208	MARKERS-HOMERS		20	10/1/68	01.0	NAV
N10	88217	VOT ONLY	N12	60	7/1/74	03.5	NAV
N11	88218	VOR- VOT		50	5/1/74	02.5	NAV
N12	88219	ILS/VOR PRINCIPLES	N12	65	5/1/74	03.0	NAV
N13	88220	ILS CONCEPTS	N12 & N13	110	5/1/74	04.0	NAV
N14	88221	ILS, TUBE TYPE	N12, N13 & PVE-44712	50	5/1/74	04.0	NAV
N15	88222	ILS, WILCOX MARK 1A/1C	N12, N13 & PVE-44712	50	5/1/74	03.5	NAV
N16	88223	ILS, AIL MARK 1B					
N17	88224	ILS, GRN-27 (CATEGORY II)	N12, N13,& PVE-44712	50	6/1/75	04.0	NAV
N19	88226	DME,BUTLER/1020/ WILCOX/595/596	N12, N13 & ANY OF N14/N15/N16/N17	30	6/1/75	02.5	NAV
N20	88227	CEGS (TUBE & SOLID STATE)	N12, N13 & PVE-44712	20	6/1/75	01.5	NAV
				50	5/6/77	03.0	NAV
N21	88228	ILS, AIL TYPE 55		33	11/1/77	01.5	NAV
N26	88233	DME, CARDION FA-8974					
N27	88234	ILS, MARK 1D/E/F, LOCALIZER	N12 & N13	33	2/14/78	02.5	NAV
N28	88235	ILS, MARK-1D/E/F NULL REF GLDSL	N12 &N13	33	2/21/78	03.0	NAV
N29	88236	ILS, MARK 1D/E/F MARKER BEACON	C1	20	2/14/78	03.0	NAV

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 2. Current Concept/Theory-of-Operation Examinations (Continued)

EXAM NUMBER	PMIS NUMBER	EXAMINATION TITLE	PREREQUISITE EXAMS OF	NUMBER QUESTIONS	AVAILABILITY DATE	TIME	AREA
N30	88237	ILS, MARK 1D, REMOTE MONITOR		70	3/27/78	03.0	NAV
N31	88238	CARDION DME, FA-9639		33	3/23/79	02.0	NAV
N32	88239	RHO-THETA CTRL (RTC-1)		48	11/1/79	03.5	NAV
N33	88240	ILS S.B. REF. G.S. (TT)		30	8/24/81	02.0	NAV
N34	88241	CARDION SS VOR		70	3/9/82	03.0	NAV
N35	88242	2ND GEN VORTAC		110	11/13/84	06.0	NAV
N36	88243	CARDION DME FA 9783		50	3/12/86	03.0	NAV
N38	88245	ILS COMMON PRINC.		75	3/25/86	04.0	NAV
N39	88246	VOR/TAC/DME COMMON PRINC.		120	3/7/86	04.0	NAV
N40	88247	DOUBLE S.B. DOPPLER VOR		27	8/1/85	02.5	NAV
N41	88248	MICROWAVE LANDING SYSTEM		30	2/27/87	01.1	NAV
R5	88309	RMLR-1A/2/3/4		50	10/30/65	04.0	RAD
R6	88310	RBDE ONLY (3/4/5)		60	12/1/67	02.5	RAD
R7	88311	SECRA, INDICATOR ONLY		15	12/1/67	02.0	RAD
R9	88313	BRITE-1		20	1/1/71	02.0	RAD
R10	88314	RADAR PRINCIPLES A	PVE-44712 & PVE-44702	100	5/1/73	04.0	RAD
R11	88315	RADAR PRINCIPLES B	PVE-44712, PVE-44702 & R10	100	5/1/73	04.0	RAD
R12	88316	RBDE 6 SCAN CONVERTER	PVE-44712, PVE-44702 & R10	30	6/1/75	02.5	RAD
R13	88317	ASR-7	PVE-44712, PVE-44702 R10 & R11	50	5/1/74	04.0	RAD
R15	88319	ATCBI-4 (DIGITAL DEFRUITER)	PVE-44712, PVE-44702, R10 & R11	40	5/1/74	04.0	RAD
R16	88320	RML-6	PVE-44712, PVE-44702, &R10	50	5/1/74	04.0	RAD
R18	88322	RML-T ARTCC TERMINAL	PVE-44712, PVE-44702 & R10	40	6/1/75	03.5	RAD
R21	88325	BRITE-1/2/4 (TV DISPLAY)		30	6/1/75	02.5	RAD
R24	88328	RML-6 REPEATER		50	6/15/77	04.0	RAD
R25	88329	ASR-4/5/6 TRANSMITTER SITE		35	6/15/77	02.5	RAD
R26	88330	COMMON DIGITIZER (HEIGHT ONLY)		35	6/15/77	03.0	RAD
R27	88331	DIGITAL DEFRUITER		20	6/15/77	04.0	RAD
R28	88332	TPX-42		25	11/10/77	02.0	RAD
R29	88333	ARSR-1/2		50	11/1/77	04.0	RAD
R30	88334	SOLID STATE VIDEO MAPPER		45	1/18/78	02.0	RAD
R31	88335	ATCBI-5		32	11/1/77	03.0	RAD
R32	88336	ASR-8	PVE-44712, PVE-44702, R10 & R11	50	9/14/78	05.0	RAD
R33	88337	BRITE-2/4	PVE-44712, PVE-44702 & R10	40	9/14/78	03.0	RAD
R34	88338	TML, TERRACOM		40	6/9/78	01.5	RAD
R35	88339	RMLR/T-1/2/3/4		50	5/4/82	04.0	RAD
R36	88340	TPX-42 BRITE NUMERICS		40	9/29/81	04.0	RAD
R37	88341	ARSR-3 MILITARY INTERFACE MOD.		35	10/28/81	04.0	RAD
R38	88342	IMC, TML EQUIPMENT		20	11/6/81	02.0	RAD
R39	88343	RADAR BEACON RMTE SYS MON.(RSM)		30	1/13/83	03.0	RAD
R40	88344	ATCBI-3 (TRANSMITTER/ RECEIVER)		25	12/15/86	03.0	RAD

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 2. Current Concept/Theory-of-Operation Examinations (Continued)

EXAM NUMBER	PMIS NUMBER	EXAMINATION TITLE	PREREQUISITE EXAMS	NUMBER OF QUESTIONS	AVAILABILITY DATE	TIME	AREA
R41	88345	ARSR-3		35		06.5	RAD
D2	88401	CODED TIME SOURCE		20	9/30/77	02.0	DAT
D3	88402	PERIPHERAL DEVICES		50	11/1/77	04.0	DAT
D4	88403	DRG/IFDS	PVE-44702	50	11/30/78	04.0	DAT
D5	88404	FLGT DATA ENTRY PRINTOUT (FDEP)		67	3/3/78	08.0	DAT
D6	88405	IBM 9020A PROCESSOR		160	2/26/79	13.0	DAT
D7	88406	IBM 9020 INPT/OTPT (I/O) EQUIP.		100	2/26/79	08.0	DAT
D8	88407	DASF EQUIPMENT		50	2/26/79	04.0	DAT
D13	88412	ARTS III SYS UPDT THEORY OF OPER		35	10/7/81	03.0	DAT
D14	88413	IBM-029/129		25	4/12/82	02.0	DAT
D15	88414	SENSOR RCVR PROCESSOR (SRAP)		25	4/23/82	03.0	DAT
D17	88416	DATA PROC. SUBSYS ARTSIIIA/EART		55	4/7/83	04.0	DAT
D18	88417	ARTS IIIA DTA ENTY DISP.SYS(DEDS		27	4/7/83	03.0	DAT
D19	88418	DATA ACQUIS. SUBSYS/ ARTSIIIA(DAS		45	4/7/83	04.0	DAT
D22	88421	COMPUTER UPDATE (CUE)		50	10/1/84	04.0	DAT
D23	88422	SYSTEM MAINT. MON. CONSOLE(SMMC		50		04.0	DAT
D24	88423	CONT. DTA RCD SYS (CDR)/ARTS-IIIA		50	3/7/86	04.0	DAT
D25	88424	INTERFCE BUFFER ADPTER GEN(IBAG)		40	3/7/86	04.0	DAT
D26	88425	EARTS DTA ACQUIS. SUBSYS (EDAS)		40	4/30/86	04.0	DAT
D28	88427	ENRTE AUTMTD RDAR TRCKING SYS.		40	4/30/86	04.0	DAT

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 3. Current Performance Examinations

EXAM NUMBER	PMIS NUMBER	EXAMINATION TITLE	DATE OF CURRENT EXAM	TIME (HOURS)	AREA
CP7	88518	MULTI-CHANNEL RECORDER TYPE CA-1700	11/30/90	3.0	COM
CP9	88520	WIND/ALTIMETER EQUIPMENT	09/17/90	3.5	COM
CP16	88527	VDF TYPE CA-3300	11/30/90	4.0	COM
CP18	88529	VDF (DOPPLER) FA-5530	11/30/90	12.0	COM
CP19	88530	RBC (ROTATING BEAM CEILOMETER)	11/30/90	5.0	COM
CP29	88540	LEACH 5-CHANNEL RECORDER TYPE FA-8144	11/30/90	7.5	COM
CP30	88541	VDF (DOPPLER) REMOTIN' EQUIPMENT	11/30/90	3.0	COM
CP31	88542	RECORDER, MAGNASYNC TR-1720/1710	11/30/90	5.0	COM
CP32	88543	BUEC REMOTE SITE, FA-8190/8191	09/17/90	8.0	COM
CP33	88544	HIGH CAPACITY VOICE RECORDER	12/19/90	13.0	COM
CP34	88545	BUEC, REMOTE CONTROL GROUP (ARTCC)	09/12/90	4.0	COM
CP36	88547	COMMUNICATION LINK EQUIPMENT, FARINON TYPE PT-150	11/30/90	10.0	COM
CP37	88548	LLWAS FA-9981	11/30/90	8.0	COM
CP38	88549	LLWAS, CLIMATRONICS FA-10044	11/30/90	8.0	COM
CP39	88550	DOPPLER DF, FA-9964	09/17/90	8.0	COM
CP40	88551	MCR DICTAPHONE 5000 RECORDER	10/26/90	4.0	COM
CP41	88552	ATIS-TWEB AUTOMATIC ELECTRIC TYPE FA-65-WA-1347	11/30/90	4.0	COM
CP42	88553	ATIS-TWEB STANCIL-HOFFMAN TYPE TRC-89	11/30/90	4.0	COM
CP43	88554	ATIS-TWEB CA-3409A AND FA-5210	11/30/90	8.0	COM
CP44	88555	ATIS-TWEB TYPE FA-9758	11/30/90	8.0	COM
CP45	88556	ATIS-AMPRO TWEB	11/30/90	8.0	COM
CP46	88557	ATIS-12 COMEX SOLID STATE FA-10012	11/30/90	1.0	COM
CP47	88558	VHF COMMUNCIATION EQUIPMENT	10/02/90	8.0	COM
CP48	88559	UHF COMMUNICATION EQUIPMENT	10/02/90	8.0	COM
CP49	88560	CE AMPLIFIERS AND AUDIO EQUIPMENT	09/12/90	6.0	COM
CP50	88561	CE CONTROL SITE WIRING	09/12/90	4.0	COM
CP51	88562	COMMUNICATIONS EQUIPMENT FACILITY WIRING (REMOTE SITE)	01/29/91	2.0	COM
CP52	88563	CE CONTROL AND MONITORING EQUIPMENT	11/07/90	7.0	COM
CP53	88564	FREQUENCY MODULATION EQUIPMENT (LCOT)	11/30/90	6.0	COM
CP54	88565	LCOT MICROWAVE EQUIPMENT,FARINON	11/30/90	16.0	COM
CP55	88566	LCOT CONTROL AND MONITORING EQUIPMENT	11/30/90	4.0	COM
CP56	88567	RVR/RVV TRANSMISSOMETER	11/30/90	2.0	COM
CP57	88568	RVR/RVV (SSR)	11/30/90	3.0	COM
CP58	88569	RVR/RVV (IRA)	11/30/90	3.0	COM
CP59	88570	RVR/RVV (AERONCA)	11/30/90	3.0	COM
CP60	88571	RVR/RVV (TASKER 500)	10/30/90	3.0	COM
CP61	88572	SINGLE CHANNEL DIGITAL RECORDER SYSTEM TYPE FA-10146	11/30/90	12.0	COM
CP62	88573	QUALIMETRICS AWOS	08/30/90	4.0	COM
CP63	88574	ROCKWELL/COLLINS MIR-2/GRANGER DTL-7300	01/07/91	6.0	COM
EP1B	88601	VASI	09/12/90	6.0	ENV
EP1C	88602	REIL, LDIN	11/30/90	4.0	ENV
EP1F	88605	ARBCN	11/30/90	4.0	ENV
EP2	88606	ARTCC CRITICAL POWER SYSTEMS	09/17/90	16.0	ENV
EP3	88607	ARTCC POWER CONDITIONING SYSTEM (PCS)	11/30/90	16.0	ENV
EP4	88608	OMNIDIRECTIONAL APPROACH LIGHTING SYSTEM	09/17/90	4.0	ENV
EP5	88609	ALSF/MALS/SALS/RAIL	11/30/90	12.0	ENV
EP6	88610	MULTI ELECTRIC MALSR FA 9425/1	09/18/90	4.0	ENV
EP7	88611	UPS EXIDE	11/30/90	16.0	ENV
NP1	86700	VOR (TT)	11/30/90	10.0	NAV
NP2	86701	VOT (TT)	11/30/90	4.0	NAV
NP3	88702	DVOR DOPPLER VHF TUBE TYPE	11/30/90	12.0	NAV
NP8	88707	NDB-COMLO FA-9782	10/30/90	7.0	NAV
NP9	88708	MARKERS (TUBE TYPE)	11/30/90	7.0	NAV

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 3. Current Performance Examinations (Continued)

EXAM NUMBER	PMIS NUMBER	EXAMINATION TITLE	DATE OF CURRENT EXAM	TIME (HOURS)	AREA
NP11B	88711	AM/1720 ANTENNA SPEED CONTROL	11/30/90	1.5	NAV
NP11C	88712	C-2634 ANTENNA SPEED CONTROL	11/30/90	1.0	NAV
NP12	88713	RTB-2	11/30/90	6.5	NAV
NP13	88714	RTC-1	11/30/90	7.0	NAV
NP14	88715	RTC-2	11/30/90	7.0	NAV
NP15	88716	GRN-9/A/B/C TACAN BEACON EQUIPMENT	11/30/90	5.5	NAV
NP19	88720	DME(TT)	11/30/90	11.0	NAV
NP23	88724	RTC-3	11/30/90	8.0	NAV
NP30	88731	SOLID STATE MARKERS	11/30/90	5.0	NAV
NP32	88733	REMOTE RADIO CONTROLLED VISUAL NAVAIDS	11/30/90	10.0	NAV
NP35	88736	VHF CARDION NAVAID TRANSMITTER EQUIPMENT TYPE FA-9467	11/30/90	10.0	NAV
NP40	88741	CARDION DME (FA-S 83)	08/30/90	10.0	NAV
NP41	88786	DOPPLER VOR TYPE FA-9996	09/14/90	10.0	NAV
NP42	88742	ILS, AIL TYPE 55 MKR	02/06/91	5.0	NAV
NP43	88743	LOC, AIL TYPE 55	09/14/90	8.0	NAV
NP44	88744	ILS,AIL TYPE 55 GS	11/30/90	8.0	NAV
NP45	88745	LOC WILCOX MARK 1A (FA-8000)	09/14/90	8.0	NAV
NP46	88746	GS WILCOX MARK 1A (FA-8020)	11/30/90	8.0	NAV
NP47	88747	MKR WILCOX 1A (FA-8030)	09/14/90	5.0	NAV
NP48	88748	LOC WILCOX 1C (FA-8840)	09/12/90	8.0	NAV
NP49	88749	GSCE WILCOX MARK 1C (FA-8877)	11/30/90	8.0	NAV
NP50	88750	GSSBR WILCOX MARK 1C (FA-9377)	11/30/90	8.0	NAV
NP51	88751	MKR WILCOX MARK 1C (FA-8831)	09/14/90	5.0	NAV
NP52	88752	ILS, WILCOX MARK 1C NRGS FA-8860	11/30/90	8.0	NAV
NP53	88753	LOC WILCOX MARK 1F (FA-9903)	09/14/90	8.0	NAV
NP54	88754	GSNR WILCOX MARK 1F (FA-9919)	09/14/90	8.0	NAV
NP55	88755	GSSRB WILCOX MARK 1F (FA-9919/9929)	09/12/90	10.0	NAV
NP56	88756	GSCE WILCOX MARK 1F (FA-9919/9928)	08/31/90	10.0	NAV
NP57	88757	MKR WILCOX MARK 1F (FA-9930/9937)	10/16/90	5.0	NAV
NP58	88758	LOC TYPE AN/GRN27	09/14/90	8.0	NAV
NP59	88759	ILS, NRGS TYPE AN/GRN 27	11/30/90	10.0	NAV
NP60	88760	MKR TYPE AN/GRN28	11/30/90	4.0	NAV
NP61	88761	GSCE TYPE AN/GRN27	12/04/90	10.0	NAV
NP62	88762	LOC WILCOX MARK 1D/1E (FA-9350/9700)	10/12/90	8.0	NAV
NP63	88763	GSNR WILCOX MARK 1D/1E (FA-9365/9715)	10/31/90	8.0	NAV
NP64	88764	GSSBR WILCOX MARK 1D/1E (FA-9367)	10/26/90	10.0	NAV
NP65	88765	GSCE WILCOX MARK 1D/1E (FA-9366/97XX)	10/16/90	10.0	NAV
NP65	88766	MKR WILCOX MARK 1D/1E (FA-938X/972X)	10/16/90	5.0	NAV
NP67	88767	LOC MARK 1B (FA-8602)	11/30/90	8.0	NAV
NP68	88768	GSNR MARK 1B (FA-8601)	11/30/90	8.0	NAV
NP69	88769	GSCE MARK 1B (FA-8600)	11/30/90	8.0	NAV
NP70	88770	MKR MARK 1B (FA-8603)	10/18/90	5.0	NAV
NP71	88771	GSNR (GENERAL)	11/30/90	8.0	NAV
NP72	88772	GSSBR (GENERAL)	09/25/90	8.0	NAV
NP73	88773	GSCE (GENERAL)	11/19/90	10.0	NAV
NP74	88774	CARDION DME TYPE FA-9639	11/30/90	5.0	NAV
NP75	88775	CARDION DME TYPE FA-8974	11/21/90	5.0	NAV
NP76	88776	2ND GEN VORTAC BCPS FA-9996/1	11/20/90	2.0	NAV
NP77	88777	2ND GEN VORTAC FCPU FA-9996/2	11/21/90	6.0	NAV
NP78	88778	2ND GEN VORTAC RMCF FA-9996/7	10/18/90	2.0	NAV
NP79	88779	2ND GEN VORTAC DME/TACAN FA-9996/3	09/17/90	6.0	NAV
NP80	88780	ANTENNA SPEED CON ROL FA-6247/6238	09/10/90	2.0	NAV
NP82	88782	LOC WILCOX CAT III TYPE FA-9759	10/23/90	8.0	NAV
NP83	88783	ILS, WILCOX CAT III MKR FA-9761	12/11/90	5.0	NAV
NP84	88784	GSNR WILCOX CAT III TYPE FA-9760/5	11/30/90	8.0	NAV
NP85	88785	GSCE WILCOX CAT III TYPE FA-9760	11/23/90	8.0	NAV
NP86	88787	VHF OMNIRANGE WILCOX MODEL 476B	11/30/90	10.0	NAV
NP87	88788	VHF OMNIRANGE WILCOX MODEL 585B	02/05/91	10.0	NAV

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 3. Current Performance Examinantions (Continued)

EXAM NUMBER	PMIS NUMBER	EXAMINATION TITLE	DATE OF CURRENT EXAM	TIME (HOURS)	AREA
NP88	88789	LOC w/V-RING ANTENNA ARRAY	10/10/90	8.0	NAV
NP89	88790	LOC w/8-LOOP ANTENNA SYSTEM	09/12/90	8.0	NAV
NP90	88791	LOCALIZER W/TRAVELING WAVE ANTENNA SYSTEM	11/30/90	8.0	NAV
NP91	88792	LOCALIZER W/WAVEGUIDE ANTENNA ARRAY	11/30/90	8.0	NAV
NP92	88793	BUTLER DME MODEL 1020	09/26/90	8.0	NAV
NP93	88794	WILCOX MODEL 596B DME	04/30/91	8.0	NAV
NP94	88795	NDB NAUTEL NX 8000BD-02-01	09/17/90	10.0	NAV
NP95	88796	NDB SCIENTIFIC RADIO (FA-9589/9591)	12/04/90	14.0	NAV
RP3	88802	ARSR-1/2 (T/R SITE)	11/30/90	12.0	RAD
RP4	88803	ASDE-2 FA-6600	10/12/90	6.0	RAD
RP5A	88804	ATCBI 3, RADAR SITE	11/30/90	7.0	RAD
RP6	88805	UPX-14	11/30/90	8.0	RAD
RP7	88807	UPX-6/GPX-9B	11/30/90	8.0	RAD
RP13	88813	RBDE-4	11/30/90	24.0	RAD
RP14	88814	RBDE-5/5A & 6 HORIZONTAL DISPLAY	09/20/90	30.0	RAD
RP24	88834	ARAR-1/2 (INDICATOR SITE)	11/30/90	4.0	RAD
RP31	88841	FPS-65A	11/30/90	16.0	RAD
RP32	88842	FPS-66/67	10/17/90	16.0	RAD
RP33	88843	ATCBI-4 FA-8470	08/30/90	7.0	RAD
RP35	88845	ASR-7/7E/7F (RADAR SITE) FA-8200	04/30/91	10.0	RAD
RP37	88847	RMLT-5, RADAR SITE	11/30/90	12.0	RAD
RP39	88849	ARTS III	11/30/90	27.0	RAD
RP40	88850	CD, FYQ-47/49	09/17/90	12.0	RAD
RP41A	88851	FPS-90/FPS-6/FPS-116	11/30/90	16.0	RAD
RP48	88858	ASR-8 TRANSMITTER SITE (FA-9335)	08/30/90	10.0	RAD
RP5D	88860	BRITE ALPHA NUMERICS (BANS) SUBSYSTEM	11/30/90	16.0	RAD
RP51	88861	ARTS II FA-9020	11/30/90	40.0	RAD
RP53	88863	ATCBI-5 FA-9400	09/24/90	10.0	RAD
RP55	88865	AN/GPN21 ASR-8 TRANSMITTER SITE	11/30/90	10.0	RAD
RP56	88866	EARTS	01/25/91	36.0	RAD
RP58	88868	RCL REPEATER	10/01/90	16.0	RAD
RP59	88869	BRITE 2 PPI/TV CAMERA FA-8179/8182	11/30/90	10.0	RAD
RP60	88870	BRITE 2 TV DISPLAY FA-8181	11/30/90	2.0	RAD
RP61	88871	BRITE 4 PPI/TV CAMERA	10/16/90	8.0	RAD
RP62	88872	BRITE 4 TV DISPLAY	10/16/90	2.0	RAD
RP63	88873	BRITE 1 PPI/TV CAMERA	12/04/90	8.0	RAD
RP64	88874	BRITE 1 TV DISPLAY	12/04/90	2.0	RAD
RP65	88875	ASR-4 TRANSMITTER FA-4700	11/30/90	8.0	RAD
RP66	88876	ASR-5D,E/6D,E TRANSMITTER FA-4900/5900	02/01/91	8.0	RAD
RP67	88877	ASR-4 DISPLAY SYSTEM FA-4800	01/29/91	6.0	RAD
RP68	88878	ASRDS DISPLAY SYSTEM FA-7300	11/30/90	4.0	RAD
RP69	88879	ASRDS-2 DISPLAY SYSTEM FA-7700	11/30/90	4.0	RAD
RP70	88880	ASRDS-3 DISPLAY SYSTEM FA-8150	09/13/90	4.0	RAD
RP71	88881	TML-3 MICROWAVE TRANSMITTER FA-9797	11/30/90	3.0	RAD
RP72	88882	TML-3 MICROWAVE RECEIVER FA-9798	09/17/90	3.0	RAD
RP73	88883	VIDEO MAPPER GROUP AN/GPS-131(V)	11/30/90	2.0	RAD
RP74	88884	VIDEO MAPPER GROUP FA-8049	11/30/90	2.0	RAD
RP75	88885	VIDEO MAPPER, FIVE CHANNEL FA-8970	01/22/91	2.0	RAD
RP76	88886	TELEVISION MICROWAVE LINK TCM-6 TRANSMITTER	11/15/90	3.0	RAD
RP77	88887	TELEVISION MICROWAVE LINK TCM-6 RECEIVER	11/15/90	3.0	RAD
RP78	88888	ATCBI-2 INDICATOR SITE	11/30/90	4.0	RAD
RP79	88889	ATCBI-3 INDICATOR SITE	11/30/90	4.0	RAD

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 3. Current Performance Examinations (Continued)

EXAM NUMBER	PMIS NUMBER	EXAMINATION TITLE	DATE OF CURRENT EXAM	TIME (HOURS)	AREA
RP80	88890	RMLI 1A/2/3/4 INDICATOR SITE	09/17/90	7.0	RAD
RP81	88891	RMLR 1A/2/3/4 RADAR SITE	11/30/90	7.0	RAD
RP82	88892	RMLT-6 RADAR SITE	11/30/90	12.0	RAD
RP83	88893	RMLR-6 REPEATER SITE	11/30/90	12.0	RAD
RP84	88894	RMLI-6 INDICATOR SITE	10/04/90	12.0	RAD
RP85	88895	GPN 22 PRECISION APPROACH RADAR (PAR)	11/30/90	14.0	RAD
RP86	88896	ARSR 60/60M	11/30/90	20.0	RAD
RP87	88897	FPS-20/91	11/30/90	20.0	RAD
RP88	88898	RMLI-5, INDICATOR SITE	11/30/90	12.0	RAD
RP89	88899	RMLR-5, REPEATER SITE	11/30/90	10.0	RAD
RP90	89000	ARTS IIA TYPE FA-9020	09/13/90	40.0	RAD
RP91	89001	ARTS IIIA	11/30/90	60.0	RAD
RP92	89002	RCL AREA CONTROL	09/17/90	26.0	RAD
RP93	89003	SOLID-STATE RECEIVER & DIGITAL MOVING TARGER INDICATOR (SSR/DMTI) FOR ARSR 1/2, ARSR 60, & FPS 20	11/30/90	10.0	RAD
RP94	89004	AIR ROUTE SURVEILLANCE RADAR (ARSR-3)	11/05/90	4.0	RAD
RP95	89005	ASR-9 SYSTEMS	11/20/90	51.0	RAD
RP96	89006	COMMON DIGITIZER-2A/B/C/D	10/23/90	8.0	RAD
RP97	89007	DBRITE (DIGITAL BRIGHT INDICATOR TOWER EQUIPMENT)	04/30/91	6.0	RAD
DP4	88904	CODED TIME SOURCE	09/12/90	2.0	DAT
DP5	88905	CDC DISPLAY (CDC-D)	09/12/90	12.0	DAT
DP6	88906	COMPUTER UPDATE EQUIPMENT	09/12/90	6.0	DAT
DP7	88907	TEST EQUIPMENT CONSOLE FA-7929	12/11/90	5.0	DAT
DP8	88908	CDC PROCESSOR (CDC-P)	12/06/90	10.0	DAT
DP9	88909	SYSTEM MAINTENANCE MONITOR CONSOLE	10/18/90	8.0	DAT
DP10	88910	DATA REC. GROUP/INTERFACILITY DATA SET	10/18/90	8.0	DAT
DP12	88912	129 KEYPUNCH (CARD DATA RECORDER)	11/14/90	3.0	DAT
DP13	88913	DIRECT ACCESS STORAGE FACILITY (DASF)	11/06/90	10.0	DAT
DP15	88915	CENTRAL COMPUTER COMPLEX INPUT/OUTPUT	10/10/90	18.0	DAT
DP16	88916	DARC SYSTEM ENHANCED DARC	09/12/90	16.0	DAT
DP17	88918	DISPLAY CHANNEL PROCESSOR (9020E)	09/28/90	40.0	DAT
DP18	88919	MAINTENANCE PROCESSOR SUBSYSTEM	09/25/90	12.0	DAT
DP19	88920	FSAS-AFSS/FSDPS	11/30/90	20.0	DAT
DP21	88922	HOST COMPUTER SYSTEM (CCCH)	10/02/90	18.0	DAT
DP22	88923	PERIPHERAL ADAPTER MODULE (PAM) 7289-2	09/20/90	4.0	DAT
DP23	88924	1052 INPUT/OUTPUT TYPEWRITER (IOT)	11/30/90	4.0	DAT
NFNP3	NFP03	VOR, WILCOX MODEL 476A/B	03/01/91	4.0	NF
NFNP6	NFP06	WILCOX 482 VOR	03/01/91	10.0	NF
NFNP8	NFP08	NON-DIRECTIONAL BEACONS (NDB-MHW)	03/07/91	8.0	NF
NFNP9	NFP09	MARKER (TUBE TYPE)	02/26/91	7.0	NF
NFNP10	NFP10	NON-DIRECTIONAL BEACON (SOLID STATE)	03/07/91	12.0	NF
NFNP12	NFP12	EDO MODEL 780 VOR	11/30/90	10.0	NF
NFNP14	NFP14	E-SYSTEMS VOR	11/30/90	8.0	NF
NFNP16	NFP16	MICROWAVE LANDING SYSTEM	03/08/91	20.0	NF
NFNP17	NFP17	WILCOX SDF/LOCALIZER TYPE 1260/1261	02/05/91	8.0	NF
NFNP18	NFP18	WILCOX MARKERS	02/05/91	5.0	NF

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 4. Previous Concept/Theory of Operation Examinations

EXAM NUMBER	PMIS NUMBER	EXAMINATION TITLE	REMARKS
C1-M	88002	CMLT	CANCELLED 07/09/79
C1-R	88003	RECORDERS	CHANGED TO C2 11/01/79
C7	88013	UHF/VHF DF	CANCELLED 03/18/86
C9	88015	RVR (AERONCA)	CANCELLED 03/18/86
D1	88400	ADIB, DDIB, APULS	CANCELLED 07/09/79
E1-V	88101	VMAS	REPLACED BY E3, E4 AND E5 07/79
E2	88102	550KW ENGINE GENERATOR	CANCELLED 03/12/86
E1-D	88198	DIESEL ENGINE GENERATOR	CANCELLED 07/09/79
E1-G	88199	GASOLINE ENGINE GENERATOR	CANCELLED 07/09/79
N1	88200	VOR-VOT	REPLACED BY N11 & N12 07/09/79
N1-D	88201	DOPPLER VOR	CANCELLED 01/05/87
N2	88215	TACAN PRINCIPLES	NOT AVAILABLE ON CBI
N2-M	88203	TACAN, RTC-3	CANCELLED 01/05/87
N3	88204	ILS-LTDA	REPLACED BY N12, N13 AND N14
N3-C	88205	CAPTURE EFFECT GLIDE SLOPE	REPLACED BY N20 07/09/79
N3-V	88206	V-RING LOCALIZER	INCLUDED IN N13 07/09/79
N4-R	88209	SRA-MRL	CHANGED TO N9 07/09/79
N5	88210	DF	COMBINED INTO N6 AND N7 07/79
N5-D	88211	DOPPLER DF	COMBINED IN N6 07/09/79
N5-V	88212	VHF/VDF	COMBINED TO N7 07/09/79
N6	88213	UVDF (DOPPLER)	CHANGED TO C6 07/09/79
N7	88214	UDF/VDF	CHANGED TO C7 07/09/79
N8	88215	DME PRINCIPLES	NOT AVAILABLE ON CBI
N9	88216	SRA-MRL	CANCELLED 07/09/79
N22	88229	TACAN, RTA-2/RTB-2	CANCELLED 01/05/87
N23	88230	TACAN, RTC-2	CANCELLED 01/05/87
N24	88231	TACAN, URN-9A/B	CANCELLED 01/05/87
N25	88232	TACAN, URN-9C	CANCELLED 02/28/87
R1	88300	BASIC RADAR	REPLACED BY R10 & R11 07/09/7
R1-B	88301	SECRA	CANCELLED 01/08/87
R1-D	88302	RDDE-3/4/5	CANCELLED 01/08/86
R1-E	88303	RDDE-2	CANCELLED 07/09/79
R1-L	88304	RMLT/R-1A/2/3/4	CANCELLED 06/22/82
R1-T	88305	BRITE-1	CHANGED TO R9 11/01/79
R2	88306	SECRA	CHANGED TO R1-D 07/09/79
R3	88307	RDDE	CHANGED TO R1-D 07/09/79
R4	88309	RML-T/R	CHANGED TO R1-L 07/09/79
R8	88312	RMLT/R ONLY (1A/2/3/4)	CANCELLED 06/22/82
R14	88318	ATCBI (STORAGE TUBE DEFRUITER)	CANCELLED 11/01/79
R17	88321	BRITE-2/4	REPLACED BY R33 07/09/79
R19	88323	ASR-4/5/6	NOT AVAILABLE ON CBI
R22	88326	RML-5 REPEATER SITE	CANCELLED USE R16 11/01/79

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 5. Previous Performance Examinations

EXAM NUMBER	PMIS NUMBER	EXAMINATION TITLE	REMARKS
CP1A	88500	RCAG	COMBINEDIN CP10
CP1B	88501	FSS	COMBINED IN CP11
CP1C	88502	ARTCC	COMBINED IN CP11
CP1D	88503	CS/T	COMBINED IN CP11
CP1E	88504	RCO	COMBINED IN CP10
CP1F	88505	RTR	COMBINED IN CP10
CP1G	88506	ATCT	COMBINED IN CP11
CP1H	88507	LRCO	CHANGED TO CP12
CP1I	88508	LCOT	CHANGED TO CP13
CP2A	88509	IFSS	CANCELLED 10/26/88
CP2B	88510	IFSR/SSB	CANCELLED 10/26/88
CP2C	88511	IFST/SSB	CANCELLED 10/26/88
CP2D	88512	IFST	CANCELLED 10/26/88
CP2E	88513	IFSR	CANCELLED 10/26/88
CP3	88514	UHF COMMUNICATION EQUIP.	COMBINED IN CP20 AND CP21
CP4	88515	VHF COMMUNICATION EQUIP	COMBINED IN CP20 AND CP21
CP5	88516	FM COMMUNICATION EQUIP.	COMBINED IN CP22
CP6	88517	AMPLIFIERS/AUDIO EQUIP.	COMBINED IN CP20 AND CP21
CP8	88519	CONTROL AND MONITORING EQUIP.	COMBINED IN CP20 AND CP21
CP10	88521	RCAG, RCAGL, RCO, RTR	COMBINED IN CP20
CP11	88522	FSS, ARTCC, CS/T, ATCT, RAPCON	COMBINED IN CP21
CP12	88523	LRCO	COMBINED IN CP26
CP13	88524	LCOT	COMBINED IN CP22
CP14	88525	RVR (IRA)	COMBINED IN CP28
CP15	88526	RVV	COMBINED IN CP28
CP20	88531	RCAG,RCAGL,RCO,RTR	COMBINED IN CP26
CP21	88532	FSS,ARTCC,CS/T,ATCT,RAPCO,RATCC,TRACO	COMBINED IN CP26
CP22	88533	LCOT	SPLIT TO CP53 THRU CP55
CP23	88534	RVR (SSR)	COMBINED IN CP28
CP24	88535	RVR (AERONCA)	COMBINED IN CP28
CP25	88536	ORES	CANCELLED 11/1/79
CP26	88537	COMMUNICATION EQUIPMENT	SPLIT TO CP47 THRU CP52
CP27	88538	ATIS-TWEB	SPLIT TO CP41 THRU CP46
CP28	88539	RVR/RVV	SPLIT TO CP56 THRU CP60
NP4	88703	LOCALIZER	COMBINED IN NP21
NP5	88704	WAVEGUIDE LOCALIZER	COMBINED IN NP21
NP6	88705	NULL REFERENCE GLIDE SLOPE	COMBINED IN NP24
NP7	88706	CAPTURE EFFECT GLIDE SLOPE	COMBINED IN NP24
NP10	88709	L.F. RANGE	CANCELLED 11/1/79
NP16	88717	VHF DF	CHANGED TO CP16

APPENDIX 3. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM EXAMINATIONS (CONTINUED)

Figure 3. Previous Performance Examinations

EXAM NUMBER	PMIS NUMBER	EXAMINATION TITLE	REMARKS
MP17	88718	UHF DF	CHANGED TO CP17
MP18	88719	DOPPLER DF	CHANGED TO CP18
MP20	88721	V-RING LOCALIZER	COMBINED IN MP21
MP21	88722	LOCALIZER	SPLIT TO MP88 THRU MP91
MP25	88726	ILS, WILCOX MARK 1A	SPLIT TO MP45, MP46, MP47
MP26	88727	ILS, MARK 1B	SPLIT TO MP67 THRU MP70
MP27	88728	ILS, WILCOX MARK 1C	SPLIT TO MP48 THRU MP52
MP28	88729	ILS, TYPE AN/GRN27	SPLIT TO MP58 THRU MP61
MP29	88730	DME BUTLER 1020/WILCOX 595/596	SPLIT TO MP92, MP93
MP31	88732	GLIDESLOPE (GENERAL)	CHANGED TO MP71 THRU MP73
MP33	88734	ILS, MARK 1D	SPLIT TO MP62 THRU MP66
MP37	88738	2ND GEN VORTAC	SPLIT TO MP76 THRU MP81
MP38	88739	ILS, WILCOX CAT III	SPLIT TO MP82 THRU MP85
MP39	88740	ILS, WILCOX MARK 1F	SPLIT TO MP53 THRU MP57
RP2	88801	ASR 4/5/6	SPLIT TO RP65 AND RP66
RP8	88808	PAR-1	CANCELLED 11/01/79
RP9	88809	PAR-2	CANCELLED 11/01/79
RP11	88811	RBDE-1/2	CANCELLED 11/01/79
RP15	88815	LMWT	COMBINED IN RP29
RP16	88816	LMWR	COMBINED IN RP29
RP19A	88820	FPS-24 (XTR)	CANCELLED 11/01/79
RP19B	88821	FPS-24 (RCV)	CANCELLED 11/01/79
RP19C	88822	FPS-24 (V.P)	CANCELLED 11/01/79
RP19AM	88823	FPS-24 (XTR) MODIFIED	CANCELLED 11/01/79
RP19BM	88824	FPS-24 (RCV) MODIFIED	CANCELLED 11/01/79
RP19CM	88825	FPS-24 (V.P.) MODIFIED	CANCELLED 11/01/79
RP20A	88826	FPS-27 (XTR)	CANCELLED 11/01/79
RP20B	88827	FPS-27 (RCV)	CANCELLED 11/01/79
RP20C	88828	FPS-27 (V.P)	CANCELLED 11/01/79
RP21A	88829	FPS-35 (XTR)	CANCELLED 11/01/79
RP21B	88830	FPS-35 (RCV)	CANCELLED 11/01/79
RP21C	88831	FPS-35 (V.P.)	COMBINED IN RP32
RP22	88832	FPS-66/64	COMBINED IN RP32
RP23	88833	FPS-67	CANCELLED 11/01/79
RP26	88836	MPN-13	CANCELLED 11/01/79
RP27	88837	FPS-6	SPLIT TO RP63 AND RP64
RP30	88840	DRITE 1	SPLIT TO RP59 AND RP60
RP34	88844	DRITE 2/4	SPLIT TO RP61 AND RP62
RP43	88843	DRITE IV	CANCELLED 11/01/79
RP44	88854	RBDE-6	CANCELLED 11/01/79
DP1	88900	APULS	CANCELLED 11/01/79
DP2	88901	ADIS	CANCELLED 11/01/79
DP3	88902	BDIS	

APPENDIX 4. PERSONNEL CERTIFICATION AUTHORITY ACRONYMS

1. Figure 1 of this appendix lists the standard acronyms to be used when issuing personnel certification authorities. These acronyms are to be used in all applicable places in connection with the personnel certification program.

2. Existing FAA Form 3400-3 must be retyped to conform to this list by entering the acronyms in block 4. The original initials in blocks 7 and 10 must be typed. An entry must be made in block 15 to show that the records have been changed. It is not necessary to retype the entries in block 15; however, the superseded FAA Form 3400-3 must be retained in the employee's certification file. See examples in appendix 1, figure 1.

3. If records are not completely corrected/updated before certification records are automated, then the acronyms listed in this appendix are to be used for automation of records. For service certification authority, use the listing in appendix 5,
figure 2.

APPENDIX 4. PERSONNEL CERTIFICATION AUTHORITY ACRONYMS (CONTINUED)

FIGURE 1. ACRONYMS

AREA	ACRONYM	SYSTEM/SUBSYSTEM/EQUIPMENT
COM	ARTCC	COMMUNICATIONS EQUIPMENT AT AN AIR ROUTE TRAFFIC CONTROL CENTER
	ARTS/COMM	COMMUNICATIONS EQUIPMENT AT ARTS FACILITIES
	ASI	ALTIMETER SETTING INDICATOR, ANEROID (FORMERLY PART OF W/ALT)
	ATCT	COMMUNICATIONS EQUIPMENT AT AN AIR TRAFFIC CONTROL TOWER
	ATIS/1000	AUTOMATIC TERMINAL INFORMATION SYSTEM, COMEX CDD1000 TYPE
	ATIS/146	AUTOMATIC TERMINAL INFORMATION SYSTEM, FA-10146 EQUIPMENT
	ATIS/89	AUTOMATIC TERMINAL INFORMATION SYSTEM, TRC-89 TYPE
	AWANS	AVIATION WEATHER AND NOTAM SYSTEM
	AWOS	AUTOMATIC WEATHER OBSERVATION STATION (QUALIMETRICS, HANDAR, ARTAIS)
	BUEC	BACK-UP EMERGENCY COMMUNICATIONS SYSTEM, ARTCC
	BUECR	BACK-UP EMERGENCY COMMUNICATIONS SYSTEM, REMOTE SITE
	CERAP	COMBINED CENTER/RAPCO
	CCTV	CLOSED CIRCUIT TV
	CHI	CLOUD HEIGHT INDICATION
	DASI	ALTIMETER SETTING INDICATOR, DIGITAL
	DF/121	DIRECTION FINDING EQUIPMENT, TYPE FA-10121
	DF/5530	DIRECTION FINDING EQUIPMENT, DOPPLER, TYPE FA-5530
	DF/9964	DIRECTION FINDING EQUIPMENT, SOLID STATE, TYPE FA-9964
	DFI/5530	DIRECTION FINDING EQUIPMENT, REMOTED INDICATOR SITE, TYPE FA-5530
	DFI/9964	DIRECTION FINDING EQUIPMENT, REMOTED INDICATOR SITE, TYPE FA-9964
	DF/UMIL	UHF DIRECTION FINDER, MILITARY TYPE
	DF/VMIL	VHF DIRECTION FINDER, MILITARY TYPE
	FSS	COMMUNICATIONS EQUIPMENT AT A STANDARD FLIGHT SERVICE STATION
	FSS/A	COMMUNICATIONS EQUIPMENT AT AN AUTOMATED FLIGHT SERVICE STATION
	GATR	GROUND/AIR TRANSMITTER/RECEIVER
	GOES	GEOSTATIONARY OPERATIONAL ENVIRONMENTAL SATELLITE SYSTEM
	HCVR	HIGH CAPACITY VOICE RECORDER
	HCVR/8966	HIGH CAPACITY VOICE RECORDER TYPE FA-8966
	HIWAS/1000	HIGH ALTITUDE WEATHER ADVISORY SERVICE, COMEX CDD1000 TYPE
	HIWAS/146	HIGH ALTITUDE WEATHER ADVISORY SERVICE, TYPE FA/10146 EQUIPMENT
	HIWAS/89	HIGH ALTITUDE WEATHER ADVISORY SERVICE, TRC-89 TYPE
	IATSC	INTERNATIONAL AERONAUTICAL TELECOMMUNICATIONS SWITCHING CENTER
	ICSS/1	INTEGRATED COMMUNICATIONS SWITCHING SYSTEM, TYPE 1
	ICSS/2	INTEGRATED COMMUNICATIONS SWITCHING SYSTEM, TYPE 2
	ICSS/3	INTEGRATED COMMUNICATIONS SWITCHING SYSTEM, TYPE 3
	IFSR	COMMUNICATIONS EQUIPMENT AT AN INTERNATIONAL FSS RECEIVER SITE
	IFSS	COMMUNICATIONS EQUIPMENT AT AN INTERNATIONAL FLIGHT SERVICE STATION
	IFSS/A	COMMUNICATIONS EQUIPMENT AT AN AUTOMATED INTERNATIONAL FSS
	IFST	COMMUNICATIONS EQUIPMENT AT AN INTERNATIONAL FSS TRANSMITTER SITE
	LCOT/U	COMMUNICATIONS EQUIPMENT, LINK, TERMINAL, UHF
	LCOT/V	COMMUNICATIONS EQUIPMENT, LINK, TERMINAL, VHF
	LLWAS/239	LOW LEVEL WIND SHEAR ALERT SYSTEM, FA-10239
	LLWAS/240	LOW LEVEL WIND SHEAR ALERT SYSTEM, FA-10240

APPENDIX 4. PERSONNEL CERTIFICATION AUTHORITY ACRONYMS (CONTINUED)

FIGURE 1. ACRONYMS (CONTINUED)

AREA	ACRONYM	SYSTEM/SUBSYSTEM/EQUIPMENT
COM	LLWAS/241	LOW LEVEL WIND SHEAR ALERT SYSTEM, FA-10241
	LLWAS/9980	LOW LEVEL WIND SHEAR ALERT SYSTEM, FA-9980
	LLWAS/9981	LOW LEVEL WIND SHEAR ALERT SYSTEM, FA-9981
	LLWAS/CLIM	LOW LEVEL WIND SHEAR ALERT SYSTEM, CLIMATRONICS
	MAPS	METEROLOGICAL AND AERONAUTICAL PRESENTATION SYSTEM
	MCR	MULTI-CHANNEL RECORDER, TUBE TYPE (CA1700, FA-5524, ETC.)
	MCR/MAG	MULTI-CHANNEL RECORDER, MAGNASYNC 1710 AND 1720
	MCR/5000	MULTI-CHANNEL RECORDER, DICTAPHONE 5000
	NRCS	NATIONAL RADIO COMMUNICATIONS SYSTEM
	RBC	CEILOMETER, ROTATING BEAM
	RCAG	COMMUNICATIONS EQUIPMENT, REMOTE AIR/GROUND FACILITY
	RCLR/ATT	RADIO COMMUNICATIONS LINK REPEATER AT&T EQUIPMENT
	RCLT/ATT	RADIO COMMUNICATIONS LINK TERMINAL, AT&T EQUIPMENT
	RCO	COMMUNICATIONS EQUIPMENT, REMOTE OUTLET (INCLUDES FORMER RCO)
	RRH	REMOTE READOUT HYGROTHERMOMETERS
	RTR	COMMUNICATIONS EQUIPMENT, REMOTE TRANSMIT/RECEIVE FACILITY
	RVR/10268	RUNWAY VISUAL RANGE, WITH TELEDYNE FA-10268
	RVR/7861	RUNWAY VISUAL RANGE, WITH FA-7861 COMPUTER
	RVR/AERO	RUNWAY VISUAL RANGE, AERONCA
	RVR/IRA	RUNWAY VISUAL RANGE, IRA
	RVR/SSR	RUNWAY VISUAL RANGE, SSR
	RVR/T400	RUNWAY VISUAL RANGE, TASKER 400
	RVR/T500	RUNWAY VISUAL RANGE, TASKER 500
	RVV	RUNWAY VISUAL RANGE, WITHOUT COMPUTER
	TRACO	COMMUNICATIONS EQUIPMENT AT TERMINAL RADAR APPROACH CONTROL
	TRCAB	COMMUNICATIONS EQUIPMENT AT TERMINAL RADAR APPROACH CONTROL IN TOWER CAB
	TWEB/1000	TRANSCRIBED WEATHER BROADCAST SYSTEM, COMEX CCD 1000 TYPE
	TWEB/89	TRANSCRIBED WEATHER BROADCAST SYSTEM, TRC-89 TYPE
	TWEB/AMP	TRANSCRIBED WEATHER BROADCAST SYSTEM, AMPRO TYPE
	TWEB/SONI	TRANSCRIBED WEATHER BROADCAST SYSTEM, SONICRAFT TYPE
	WIND	WIND EQUIPMENT (FORMERLY PART OF W/ALT)
DAT	ARTS/2	AUTOMATED RADAR TERMINAL SYSTEM, ARTS-II
	ARTS/2A	AUTOMATED RADAR TERMINAL SYSTEM, ARTS II ENHANCED
	ARTS/3	AUTOMATED RADAR TERMINAL SYSTEM, ARTS III
	ARTS/3A	AUTOMATED RADAR TERMINAL SYSTEM, ARTS III ENHANCED
	CCC/A	CENTRAL COMPUTER COMPLEX IBM-9020A
	CCC/D	CENTRAL COMPUTER COMPLEX IBM-9020D
	CCC/H	CENTRAL COMPUTER COMPLEX WITH HOST COMPUTER
	CCC/IO	CENTRAL COMPUTER COMPLEX INPUT/OUTPUT
	CD/2A	COMMON DIGITIZER 2, AT FAA LONG RANGE RADAR SITES
	CD/2B	COMMON DIGITIZER 2, AT ATCRB ONLY SITES
	CD/2C	COMMON DIGITIZER 2, AT JSS LONG RANGE RADAR SITES
	CD/2D	COMMON DIGITIZER 2, AT SHORT RANGE RADAR SITES
	CD/47	COMMON DIGITIZER, JOINT USE FYQ-47 (INCLUDES HEIGHT)

APPENDIX 4. PERSONNEL CERTIFICATION AUTHORITY ACRONYMS (CONTINUED)

FIGURE 1. ACRONYMS (CONTINUED)

AREA	ACRONYM	SYSTEM/SUBSYSTEM/EQUIPMENT
DAT	CD/49	COMMON DIGITIZER, FAA USE FYQ-49
	CDC	COMPUTER DISPLAY CHANNEL
	CDCD	COMPUTER DISPLAY CHANNEL DISPLAY
	CDCP	COMPUTER DISPLAY CHANNEL PROCESSOR
	CRYPTO	CRYPTOGRAPHIC EQUIPMENT
	CTS	CODED TIME SOURCE
	CUE	COMPUTER UPDATE EQUIPMENT
	DARC	DIRECT ACCESS RADAR CHANNEL
	DASF	DIRECT ACCESS STORAGE FACILITY
	DRG	DATA RECEIVER GROUP
	EARTS	ENROUTE AUTOMATED RADAR TRACKING SYSTEM
	EDAS	EARTS DATA ACQUISITION SUBSYSTEM
	FDEP	FLIGHT DATA ENTRY AND PRINTOUT SUBSYSTEM
	FDIO	FLIGHT DATA INPUT-OUTPUT SYSTEM
	FDIOR	FLIGHT DATA INPUT-OUTPUT SYSTEM, REMOTE
	FSDPS	FLIGHT SERVICE DATA PROCESSING SYSTEM
	MODE/S	MODE S DATA LINK
	MPS	MAINTENANCE PROCESSOR SUBSYSTEM
	NADIN/A	NATIONAL AIRSPACE DATA INTERCHANGE NETWORK SWITCHING CENTER
	NADIN/B	NATIONAL AIRSPACE DATA INTERCHANGE NETWORK CONCENTRATOR
	RBDPE	RADAR BEACON DATA PROCESSOR EQUIPMENT
	SRAP	ARTS-IIIA SENSOR RECEIVER PROCESSOR (MAY BE LOCATED REMOTELY FROM ARTS)
ENV	ALSF	APPROACH LIGHT SYSTEM
	ALSF/IIA	APPROACH LIGHT SYSTEM, WITH FLASHERS, SOLID STATE, DUAL MODE AIRFLOW
	ALSF/IIG	APPROACH LIGHT SYSTEM, WITH FLASHERS, SOLID STATE, DUAL MODE GODFREY
	CPS	CRITICAL POWER SYSTEMS, ARTCC
	GDL	GUIDANCE LIGHT FACILITY
	LDIN	LEAD-IN LIGHTS
	MALS	APPROACH LIGHT SYSTEM, MEDIUM INTENSITY, (MALS & MALSF)
	MALSR	APPROACH LIGHT SYSTEM, MEDIUM INTENSITY WITH RAIL
	ODALS	AIRPORT LIGHTING SYSTEM, OMNIDIRECTIONAL
	PAPI	PRECISION APPROACH PATH INDICATOR
	PCS	POWER CONDITIONING SYSTEM
	REIL	RUNWAY END IDENTIFIER LIGHTS
	SSALR	APPROACH LIGHT SYSTEM, SIMPLIFIED, SHORT, WITH RAIL
	SSALS	APPROACH LIGHT SYSTEM, SIMPLIFIED, SHORT
	VASI	VISUAL APPROACH SLOPE INDICATOR
NAV	DME/E	"E" SYSTEMS DISTANCE MEASURING EQUIPMENT,(NON-FED)
	DME/1020	DISTANCE MEASURING EQUIPMENT, BUTLER 1020
	DME/595	DISTANCE MEASURING EQUIPMENT, WILCOX 595
	DME/596	DISTANCE MEASURING EQUIPMENT, WILCOX 596
	DME/596C	DISTANCE MEASURING EQUIPMENT, WILCOX 596C

APPENDIX 4. PERSONNEL CERTIFICATION AUTHORITY ACRONYMS (CONTINUED)

FIGURE 1. ACRONYMS (CONTINUED)

AREA	ACRONYM	SYSTEM/SUBSYSTEM/EQUIPMENT
NAV	DME/8974	DISTANCE MEASURING EQUIPMENT, CARDION HYBRID FA-8974
	DME/9639	DISTANCE MEASURING EQUIPMENT, CARDION, SOLID STATE FA-9639
	DME/9783	DISTANCE MEASURING EQUIPMENT, CARDION, FA-9783D
	DME/9996	DISTANCE MEASURING EQUIPMENT, FA-9996 (2ND GEN)
	DVOR	VHF OMNI-RANGE, DOPPLER, TUBE TYPE
	DVOR/9996	VHF OMNI-RANGE, DOPPLER, FA-9996 (2ND GEN)
	GSCE/1A	GLIDE SLOPE, CAPTURE EFFECT, MARK 1A
	GSCE/1B	GLIDE SLOPE, CAPTURE EFFECT, MARK 1B
	GSCE/1BM	GLIDE SLOPE, CAPTURE EFFECT, MARK 1B MONITOR WITH MK 1F TRANSMITTER
	GSCE/1C	GLIDE SLOPE, CAPTURE EFFECT, MARK 1C
	GSCE/1D	GLIDE SLOPE, CAPTURE EFFECT, MARK 1D
	GSCE/1E	GLIDE SLOPE, CAPTURE EFFECT, MARK 1E
	GSCE/1F	GLIDE SLOPE, CAPTURE EFFECT, MARK 1F
	GSCE/27	GLIDE SLOPE, CAPTURE EFFECT, AN/GRN-27
	GSCE/55	GLIDE SLOPE, CAPTURE EFFECT, AIL-55 (NON-FED)
	GSCE/55M	GLIDE SLOPE, CAPTURE EFFECT, AIL-55 MONITOR WITH MK 1F TRANSMITTER
	GSCE/C2	GLIDE SLOPE, CAPTURE EFFECT, CATEGORY II
	GSCE/C3	GLIDE SLOPE, CAPTURE EFFECT, W/WILCOX CAT III
	GSCE/TI3	GLIDE SLOPE, CAPTURE EFFECT, W/TI MARK 3 EQUIPMENT
	GSCE/TT	GLIDE SLOPE, CAPTURE EFFECT, TUBE TYPE
	GSEF/1D	GLIDE SLOPE, END FIRE, MARK 1D
	GSEF/1E	GLIDE SLOPE, END FIRE, MARK 1E
	GSEF/1F	GLIDE SLOPE, END FIRE, MARK 1F
	GSEF/27	GLIDE SLOPE, END FIRE, AN/GRN-27
	GSNR/1A	GLIDE SLOPE, NULL REFERENCE, MARK 1A
	GSNR/1B	GLIDE SLOPE, NULL REFERENCE, MARK 1B
	GSNR/1BM	GLIDE SLOPE, NULL REFERENCE, MARK 1B MONITOR, W/MARK 1F TX
	GSNR/1C	GLIDE SLOPE, NULL REFERENCE, MARK 1C
	GSNR/1CM	GLIDE SLOPE, NULL REFERENCE, MARK 1C MODIFIED
	GSNR/1D	GLIDE SLOPE, NULL REFERENCE, MARK 1D
	GSNR/1E	GLIDE SLOPE, NULL REFERENCE, MARK 1E
	GSNR/1F	GLIDE SLOPE, NULL REFERENCE, MARK 1F
	GSNR/2	GLIDE SLOPE, NULL REFERENCE, MARK 2
	GSNR/27	GLIDE SLOPE, NULL REFERENCE, AN/GRN-27
	GSNR/55M	GLIDE SLOPE, NULL REFERENCE, AIL-55 MONITOR W/MK1F TX
	GSNR/C3	GLIDE SLOPE, NULL REFERENCE, CATAGORY III TYPE FA-9760/5
	GSNR/TT	GLIDE SLOPE, NULL REFERENCE, TUBE TYPE
	GSSBR/1A	GLIDE SLOPE, SIDEBAND REFERENCE, MARK 1A
	GSSBR/1B	GLIDE SLOPE, SIDEBAND REFERENCE, MARK 1B
	GSSBR/1BM	GLIDE SLOPE, SIDEBAND REFERENCE, MARK 1B MONITOR W/MARK 1F TX
	GSSBR/1C	GLIDE SLOPE, SIDEBAND REFERENCE, MARK 1C
	GSSBR/1D	GLIDE SLOPE, SIDEBAND REFERENCE, MARK 1D
	GSSBR/1E	GLIDE SLOPE, SIDEBAND REFERENCE, MARK 1E
	GSSBR/1F	GLIDE SLOPE, SIDEBAND REFERENCE, MARK 1F

APPENDIX 4. PERSONNEL CERTIFICATION AUTHORITY ACRONYMS (CONTINUED)

FIGURE 1. ACRONYMS (CONTINUED)

AREA	ACRONYM	SYSTEM/SUBSYSTEM/EQUIPMENT
NAV	GSSBR/27	GLIDE SLOPE, SIDEBAND REFERENCE, AN/GRN-27
	GSSBR/TT	GLIDE SLOPE, SIDEBAND REFERENCE, TUBE TYPE
	GSWG/1A	GLIDE SLOPE, WAVEGUIDE, MARK 1A
	GSWG/1B	GLIDE SLOPE, WAVEGUIDE, MARK 1B
	GSWB/1BM	GLIDE SLOPE, WAVEGUIDE, MARK 1B MONITOR W/MARK 1F TRANSMITTER
	GSWG/1C	GLIDE SLOPE, WAVEGUIDE, MARK 1C
	GSWG/1D	GLIDE SLOPE, WAVEGUIDE, MARK 1D
	GSWG/1E	GLIDE SLOPE, WAVEGUIDE, MARK 1E
	GSWG/1F	GLIDE SLOPE, WAVEGUIDE, MARK 1F
	GSWG/27	GLIDE SLOPE, WAVEGUIDE, AN/GRN-27
	GSWG/55	GLIDE SLOPE, WAVEGUIDE, AIL-55 (NON-FED)
	GSWG/TT	GLIDE SLOPE, WAVEGUIDE, TUBE TYPE
	HH	NON-DIRECTIONAL BEACON, 2KW OR MORE
	LFM/KINN	LFM, KINN ELECTRONIC CORP. TYPE FA-5791, KEC-6072
	LFM/WILCOX	LFM WILCOX TYPE 492B
	LOC/55	LOCALIZER, AIL-55 (NON-FED)
	LOC/55M	LOCALIZER, AIL-55 ANTENNA SYSTEM (TWIN T) WITH MARK 1F TRANSMITTER
	LOC2/1F	LOCALIZER, HYBRID WITH MARK 2 AND MARK 1F EQUIPMENT (DUAL TX)
	LOCAL/1A	LOCALIZER, ALFORD LOOP ANTENNA, MARK 1A
	LOCAL/1B	LOCALIZER, ALFORD LOOP ANTENNA, MARK 1B
	LOCAL/1C	LOCALIZER, ALFORD LOOP ANTENNA, MARK 1C
	LOCAL/1D	LOCALIZER, ALFORD LOOP ANTENNA, MARK 1D
	LOCAL/1E	LOCALIZER, ALFORD LOOP ANTENNA, MARK 1E
	LOCAL/1F	LOCALIZER, ALFORD LOOP ANTENNA, MARK 1F
	LOCLP/1BM	LOCALIZER, LOG PERIODIC ANTENNA, MARK 1B MONITOR WITH MARK 1F TX
	LOCLP/1D	LOCALIZER, LOG PERIODIC ANTENNA, MARK 1D
	LOCLP/1E	LOCALIZER, LOG PERIODIC ANTENNA, MARK 1E
	LOCLP/1F	LOCALIZER, LOG PERIODIC ANTENNA, MARK 1F
	LOCLP/2	LOCALIZER, LOG PERIODIC ANTENNA, WILCOX MK2 EQUIPMENT
	LOCLP/27	LOCALIZER, LOG PERIODIC ANTENNA, AN/GRN-27
	LOCLP/C2	LOCALIZER, LOG PERIODIC ANTENNA, CATEGORY II SYSTEM
	LOCLP/C3	LOCALIZER, LOG PERIODIC ANTENNA, WILCOX CATEGORY III SYSTEM
	LOCPR/TI3	LOCALIZER, PARABOLIC REFLECTOR, W/TI-MARK 3 EQUIPMENT
	LOCLP/TT	LOCALIZER, LOG PERIODIC ANTENNA, TUBE TYPE
	LOCTW/1A	LOCALIZER, TRAVELING WAVE ANTENNA, MARK 1A
	LOCTW/1B	LOCALIZER, TRAVELING WAVE ANTENNA, MARK 1B
	LOCTW/1D	LOCALIZER, TRAVELING WAVE ANTENNA, MARK 1D
	LOCTW/1E	LOCALIZER, TRAVELING WAVE ANTENNA, MARK 1E
	LOCTW/1F	LOCALIZER, TRAVELING WAVE ANTENNA, MARK 1F
	LOCTW/27	LOCALIZER, TRAVELING WAVE ANTENNA, WIDE APERTURE, 15 ELEMENTS AN/GRN-7
	LOCTW/TT	LOCALIZER, TRAVELING WAVE ANTENNA, TUBE TYPE
	LOCTW/TTM	LOCALIZER, TRAVELING WAVE ANTENNA, TUBE TYPE MODIFIED
	LOCVR/1A	LOCALIZER, V-RING ANTENNA, MARK 1A
	LOCVR/1B	LOCALIZER, V-RING ANTENNA, MARK 1B

APPENDIX 4. PERSONNEL CERTIFICATION AUTHORITY ACRONYMS (CONTINUED)

FIGURE 1. ACRONYMS (CONTINUED)

AREA	ACRONYM	SYSTEM/SUBSYSTEM/EQUIPMENT
NAV	LOCVR/1BM	LOCALIZER, V-RING ANTENNA, MARK 1B MONITOR WITH MARK 1F TRANSMITTER
	LOCVR/1C	LOCALIZER, V-RING ANTENNA, MARK 1C
	LOCVR/1CM	LOCALIZER, V-RING ANTENNA, MARK 1C MONITOR WITH MARK 1F TRANSMITTER
	LOCVR/1D	LOCALIZER, V-RING ANTENNA, MARK 1D
	LOCTW/1C	LOCALIZER, TRAVELING WAVE ANTENNA, MARK 1C
	LOCVR/1E	LOCALIZER, V-RING ANTENNA, MARK 1E
	LOCVR/1F	LOCALIZER, V-RING ANTENNA, MARK 1F
	LOCVR/27	LOCALIZER, V-RING ANTENNA, AN/GRN-27
	LOCVR/55	LOCALIZER, V-RING ANTENNA, AIL-55 (NON-FED)
	LOCVR/TT	LOCALIZER, V-RING ANTENNA, TUBE TYPE
	LOCWG/1A	LOCALIZER, WAVEGUIDE ANTENNA, MARK 1A
	LOCWG/TT	LOCALIZER, WAVEGUIDE ANTENNA, TUBE TYPE
	LORAN/C	LONG RANGE NAVIGATION MODEL C
	LTDA	LOCALIZER TYPE DIRECTIONAL AID
	MKR/SS	MARKER BEACON, SOLID STATE (IM, MM, OM, FAN)
	MKR/TT	MARKER BEACON, TUBE TYPE (IM, MM, OM, FAN)
	MLSA	MICROWAVE LANDING SYSTEM, AZIMUTH
	MLSBA	MICROWAVE LANDING SYSTEM, BACK AZIMUTH
	MLSD	MICROWAVE LANDING SYSTEM, PRECISION DISTANCE MEASURING EQUIPMENT
	MLSE	MICROWAVE LANDING SYSTEM, ELEVATION
	MLSF	MICROWAVE LANDING SYSTEM, FLARE
	NDB	NON-DIRECTIONAL BEACON INCLUDES H, LOM, LMM, & COMLO
	NDB/9582	NON-DIRECTIONAL BEACON, FA-9582 EQUIPMENT
	NDB/9589	NON-DIRECTIONAL BEACON, FA-9589 EQUIPMENT
	RRVNAS	REMOTE RADIO CONTROLLED VISUAL NAVAIDS
	TACR/9996	TACAN OR TACR WITH FA-9996 EQUIPMENT (2ND GEN)
	TACR/GRN9	TACAN OR TACR WITH GRN-9 EQUIPMENT
	TACR/RTA2	TACAN OR TACR WITH RTA-2 EQUIPMENT
	TACR/RTB2	TACAN OR TACR WITH RTB-2 EQUIPMENT
	TACR/RTC1	TACAN OR TACR WITH RTC-1 EQUIPMENT
	TACR/RTC2	TACAN OR TACR WITH RTC-2 EQUIPMENT
	TACR/RTC3	TACAN OR TACR WITH RTC-3 EQUIPMENT
	VOR	VHF OMNI-RANGE, STANDARD TUBE OR HYBRID
	VOR/585	VHF OMNI-RANGE, WILCOX 585, SOLID STATE
	VOR/9467	VHF OMNI-RANGE, CARDION FA-9467, SOLID STATE
	VOR/9996	VHF OMNI-RANGE, FA-9996 (2ND GEN)
	VOR/E	"E" SYSTEMS VHF OMNI RANGE (NON-FED)
	VOR/EDO	VHF OMNI-RANGE, EDO AIRE EQUIPMENT
	VOT	VHF OMNI-RANGE TEST FACILITY
RAD	ARSR/1	RADAR, AIR ROUTE SURVEILLANCE, ARSR-1, TX/RX SITE
	ARSR/1M	RADAR, AIR ROUTE SURVEILLANCE, ARSR-1(MODIFIED SSR/DMTI) TX/RX SITE
	ARSR/2	RADAR, AIR ROUTE SURVEILLANCE, ARSR-2, TX/RX SITE

APPENDIX 4. PERSONNEL CERTIFICATION AUTHORITY ACRONYMS (CONTINUED)

FIGURE 1. ACRONYMS (CONTINUED)

AREA	ACRONYM	SYSTEM/SUBSYSTEM/EQUIPMENT
RAD	ARSR/2M	RADAR, AIR ROUTE SURVEILLANCE, ARSR-2 (MODIFIED SSR/DMTI) TX/RX SITE
	ARSR/20	RADAR, AIR ROUTE SURVEILLANCE, FPS-20 TX/RX SITE
	ARSR/3	RADAR, AIR ROUTE SURVEILLANCE, SOLID STATE, ARSR-3 TX/RX SITE
	ARSR/60	RADAR, AIR ROUTE SURVEILLANCE, FPS-60 TX/RX SITE
	ARSR/64	RADAR, AIR ROUTE SURVEILLANCE, FPS-64 TX/RX SITE
	ARSR/60M	RADAR, AIR ROUTE SURVEILLANCE, FPS-60 TX/RX SITE MODIFIED
	ARSR/66	RADAR, AIR ROUTE SURVEILLANCE, FPS-66 TX/RX SITE
	ARSR/67	RADAR, AIR ROUTE SURVEILLANCE, ARSR-67 TX/RX SITE
	ARSR/67M	RADAR, AIR ROUTE SURVEILLANCE, ARSR-67 (MODIFIED) TX/RX SITE
	ARSR/91A	RADAR, AIR ROUTE SURVEILLANCE, FPS-91A TX/RX/ SITE
	ASDE/2	AIRPORT SURFACE DETECTION EQUIPMENT, TUBE TYPE OR HYBRID
	ASDE/2DEU	AIRPORT SURFACE DETECTION EQUIPMENT WITH DIGITAL ENHANCEMENT UNIT
	ASDE/3	AIRPORT SURFACE DETECTION EQUIPMENT, SOLID STATE
	ASDE/3DEU	AIRPORT SURFACE DETECTION EQUIPMENT WITH DIGITAL ENHANCEMENT UNIT
	ASR/GPN21	RADAR, AIRPORT SURVEILLANCE, MILITARY WITH ASR/8 EQUIPMENT
	ASR/3	RADAR, AIRPORT SURVEILLANCE, TUBE TYPE 3 TX/RX IND
	ASR/4	RADAR, AIRPORT SURVEILLANCE, TUBE TYPE 4 TX/RX/IND
	ASR/5	RADAR, AIRPORT SURVEILLANCE, TUBE TYPE 5 TX/RX/IND
	ASR/6	RADAR, AIRPORT SURVEILLANCE, TUBE TYPE 6 TX/RX/IND
	ASR/7	RADAR, AIRPORT SURVEILLANCE, TX/RX/IND
	ASR/7M	RADAR, AIRPORT SURVEILLANCE, WITH BENDIX MODIFICATION TX/RX/IND
	ASR/8	RADAR, AIRPORT SURVEILLANCE, WITH ASR-8 EQUIPMENT TX/RX/IND
	ASR/9	RADAR, AIRPORT SURVEILLANCE, WITH ASR-9 EQUIPMENT TX/RX/IND
	ATCBI/2IND	ATCRB OR ATCBI WITH ATCBI-2 EQUIPMENT, INDICATOR SITE
	ATCBI/2TR	ATCRB OR ATCBI WITH ATCBI-2 EQUIPMENT, TX/RX SITE
	ATCBI/3IND	ATCRB OR ATCBI WITH ATCBI-3 EQUIPMENT, INDICATOR SITE
	ATCBI/3TR	ATCRB OR ATCBI WITH ATCBI-3 EQUIPMENT, TX/RX SITE
	ATCBI/4	ATCRB OR ATCBI WITH ATCBI-4 EQUIPMENT, TX/RX
	ATCBI/5	ATCRB OR ATCBI WITH ATCBI-5 EQUIPMENT, TX/RX
	BRITE/D	BRITE RADAR INDICATOR TERMINAL EQUIPMENT, DIGITAL
	BRITE/1	BRITE RADAR INDICATOR TERMINAL EQUIPMENT, MODEL 1
	BRITE/1DIS	BRITE RADAR INDICATOR TERMINAL EQUIPMENT, TV DISPLAY ONLY
	BRITE/2	BRITE RADAR INDICATOR TERMINAL EQUIPMENT, MODEL 2
	BRITE/2DIS	BRITE RADAR INDICATOR TERMINAL EQUIPMENT, MODEL 2, TV DISPLAY ONLY
	BRITE/4	BRITE RADAR INDICATOR TERMINAL EQUIPMENT, MODEL 4
	BRITE/4DIS	BRITE RADAR INDICATOR TERMINAL EQUIPMENT, MODEL 4, TV DISPLAY ONLY
	CMLT	COMMUNICATIONS MICROWAVE LINK TERMINAL
	DIG/DEF	*SUB* DIGITAL DEFRUITER
	MHFR/116	MILITARY HEIGHT FINDER RADAR WITH FPS116 EQUIPMENT
	MHFR/90	MILITARY HEIGHT FINDER RADAR WITH FPS90 EQUIPMENT

APPENDIX 4. PERSONNEL CERTIFICATION AUTHORITY ACRONYMS (CONTINUED)

FIGURE 1. ACRONYMS (CONTINUED)

AREA	ACRONYM	SYSTEM/SUBSYSTEM/EQUIPMENT
RAD	PAR	PRECISION APPROACH RADAR
	RBDE/4	DISPLAY EQUIPMENT, RADAR BRIGHT, TYPE 4
	RBDE/5	DISPLAY EQUIPMENT, RADAR BRIGHT, TYPE 5
	RDBE/5A	DISPLAY EQUIPMENT, RADAR BRIGHT, TYPE 5A
	RBDE/6	DISPLAY EQUIPMENT, RADAR BRIGHT, TYPE 6
	RMLR/1A	RADAR MICROWAVE LINK REPEATER, WITH RML-1A EQUIPMENT
	RMLR/2	RADAR MICROWAVE LINK REPEATER, WITH RML-2 EQUIPMENT
	RMLR/3	RADAR MICROWAVE LINK REPEATER, WITH RML-3 EQUIPMENT
	RMLR/4	RADAR MICROWAVE LINK REPEATER, WITH RML-4 EQUIPMENT
	RMLR/5	RADAR MICROWAVE LINK REPEATER, WITH RML-5 EQUIPMENT
	RMLR/6	RADAR MICROWAVE LINK REPEATER, WITH RML-6 EQUIPMENT
	RMLT/1	TERMINAL, RADAR MICROWAVE LINK, WITH RML-1 EQUIPMENT
	RMLT/2	TERMINAL, RADAR MICROWAVE LINK, WITH RML-2 EQUIPMENT
	RMLT/3	TERMINAL, RADAR MICROWAVE LINK, WITH RML-3 EQUIPMENT
	RMLT/4	TERMINAL, RADAR MICROWAVE LINK, WITH RML-4 EQUIPMENT
	RMLT/5	TERMINAL, RADAR MICROWAVE LINK, WITH RML-5 EQUIPMENT
	RMLT/6	TERMINAL, RADAR MICROWAVE LINK, WITH RML-6 EQUIPMENT
	RRWDI	REMOTE RADAR WEATHER DISPLAY (INDICATOR SITE)
	RRWDS	REMOTE RADAR WEATHER DISPLAY-SYSTEM (RADAR SITE)
	TMLI/1	INDICATOR, TELEVISION MICROWAVE LINK, RCVR-TERRACOM TV LINK
	TMLI/3	INDICATOR, TELEVISION MICROWAVE LINK, RCVR-IMC TE LINK
	TMLI/6	INDICATOR, TELEVISION MICROWAVE LINK, MODEL 6 EQUIPMENT
	TMLT/1	TRANSMITTER, TELEVISION MICROWAVE LINK, TMTR-TERRACOM TV LINK
	TMLT/3	TRANSMITTER, TELEVISION MICROWAVE LINK, TMTR-IMC TV LINK
	TMLT/6	TRANSMITTER, TELEVISION MICROWAVE LINK, TMTR WITH MODEL 6 EQUIPMENT
	TPX/42	TPX-42 EQUIPMENT
	UPX/14	ATCRB OR ATCBI WITH UPX/14 EQUIPMENT, TX/RX
	UPX/23	ATCRB OR ATCBI WITH UPX/23 EQUIPMENT, TX/RX
	UPX/27	ATCRB OR ATCBI WITH UPX/27 EQUIPMENT, TX/RX

APPENDIX 5. AIRWAY FACILITIES PERSONNEL CERTIFICATION PROGRAM REQUIREMENTS EXAMINATIONS

This appendix lists the certification requirements for the personnel certification program with the following figures:

1. **Figure 1. System/Subsystem/Equipment with Available Examinations.**

2. **Figure 2. Listing of Services Requiring Personnel Certification.**

Figure 1. System, Subsystem, or Equipment With Available Examinations

SYSTEM/SUBSYSTEM/EQUIPMENT DATE	MANDATORY EXAMINATIONS	CONCEPT EXAMINATIONS	PERFORMANCE	AREA
ATIS	05/01/74	C2	CP41 THRU CP46	COM
ATIS, COMEX (SOLID STATE) FA-10012	*	ANY SOLID STATE DEVICE COURSE	CP46	COM
ATIS, FA-10146 (DIGITAL)	*	ANY SOLID STATE COURSE	CP61	
AWOS, QUALIMETRICS		NOT AVAILABLE	CP62	COM
BUEC ARTCC SITE	05/07/80	C11	CP32 AND CP34	COM
BUEC REMOTE SITE FA-8190/8191	*	C10	CP32	COM
CMLT (FARINON/W)	05/07/80	C13	CP36	COM
CMLT (ROCKWELL/COLLINS MIR-2/ GRANGER DTL-7300		NOT AVAILABLE	CP63	COM
COMMUNICATIONS EQUIPMENT	10/30/66	C1	CP47 THRU CP52	COM
DASI DIGITAL ALTIMETER	*	SSD	CP9	COM
DF SOLID STATE TYPE FA-9964	*	C17	CP39	COM
ICSS, TYPE 1		NOT AVAILABLE	CP47 THRU CP52	COM
LCOT	10/30/66	C1 AND C1-L	CP54 AND CP52	COM
LCOT CONTROL & MONITORING EQUIPMENT	10/30/66	C1 AND C1-L	CP55	COM
LCOT (FREQUENCY MODULATION EQUIPMENT)	10/30/76	C1 AND C1-L	CP53	COM
LLWAS (CLIMATRONICS)		NOT AVAILABLE	CP38	COM
LLWAS, FA9980/9981	*	C16	CP37	COM
RBC	01/01/72	C5	CP19	COM
RECORDERS	10/30/66	C2	CP7	COM
RECORDERS (TR-1710/1720 MAGNASYNC)	05/01/75	C2	CP31	COM
RECORDERS (HIGH CAPACITY VOICE)	05/07/80	C12	CP33	COM
RECORDERS (LEACH 5-CHANNEL FA-8144)	*	C2	CP29	COM
RECORDERS (DICTAPHONE 5000)		NOT AVAILABLE	CP40	COM
RVR (AERONA)	01/01/72	C9	CP56 AND CP59	COM
RVR (IRA)	05/01/70	C3	CP56 AND CP58	COM
RVR (T500)	*	C15A	CP56 AND CP60	COM
RVR(FA-7861, SSR)	05/01/73	C8	CP56 AND CP57	COM
RVV	01/01/72	C4	CP56	COM
TWEB	05/01/74	C2	CP41 THRU CP46	COM
UVDF (DOPPLER)	10/30/66	C6	CP18	COM
VDF(DOPPLER REMOTING EQUIPMENT)	05/01/74	C6-R	CP30	COM
VDF (TYPE CA-3300)		NOT AVAILABLE	CP16	COM
WIND/ALIMETER EQUIP (MECH.)	10/30/66	ANY ELECTRONIC COURSE	CP9	COM
ARTS-III SYSTEM UPDATE (THEORY OF OPS)	N/A	D13	N/A	DAT
ARTS-IIIA DATA ENTRY DISPLAY SYSTEM (DEDS)	*	D18	RP91	DAT
CODED TIME SOURCE	09/30/78	D2	DP4	DAT
COMPUTER DISPLAY CHANNEL DISPLAY (CDC-D)		N/A	DP5	DAT
COMPUTER DISPLAY CHANNEL PROC. (CDC-P)		NOT AVAILABLE	DP8	DAT
COMPUTER DISPLAY CHANNEL PROCESSOR 9020E		NOT AVAILABLE	DP17	DAT
COMPUTER UPDATE EQUIPMENT (CUE)	*	D22	DP6	DAT
CONT. DATA RECORDING SYS. (CDR/ARTS-IIIA)	*	D24	RP91	DAT
CENTRAL COMPUTER COMPLEX (CCC/H)		NOT AVAILABLE	DP21	
DATA ACQUISITION SUBSY., ARTS-IIIA (DAS)	*	D19	RP91	DAT
DATA PROCESSING SUBSYS. (ARTS-IIIA/EARTS)	*	D17	RP91	DAT
DATA REC. GRP/INTERFAC. DATA SET (DRG/IFDS	11/30/79	D4	DP10	DAT
DIRECT ACCESS RADAR CHANNEL (DARC)		NOT AVAILABLE	DP16	DAT
DIRECT ACCESS STORAGE FACILITY (DASF)	02/26/80	D8	DP13	DAT
EARTS DATA ACQUISITION SUBSYSTEM (EDAS)	*	D26	RP56	DAT

Figure 1. System, Subsystem, or Equipment With Available Examinations (Continued)

SYSTEM/SUBSYSTEM/EQUIPMENT	MANDATORY DATE	CONCEPT EXAMINATIONS	PERFORMANCE EXAMINATIONS	AREA
ENROUTE AUTO RAD TRACKING SYSTEM (EARTS)	*	D28	RP56	DAT
FSAS-AFSS/FSDS		NOT AVAILABLE	DP19	DAT
IBM-029/129 CARD PUNCH/READER	N/A	D14	DP12	DAT
IBM-1052 INPUT/OUTPUT TYPEWRITER(IOT)		NOT AVAILABLE	DP23	DAT
IBM-9020 INPUT/OUTPUT (I/O EQUIPMENT)	02/26/80	D7	DP15	DAT
IBM-9020A PROCESSOR	02/26/80	D6	DP14	DAT
INTERFACE BUFFER ADAPTER GENERATION (IBAG)	*	D25	RP56	DAT
MAINTENANCE PROCESSOR SUBSYSTEM		NOT AVAILABLE	DP18	DAT
PERIPHERAL ADAPTER MOD (PAM) 7289-2	05/17/79	D3	DP22	DAT
SENSOR RECEIVER PROCESSOR (SRAP)	04/23/83	D15	RP91	DAT
SYSTEM MAINT. MONITOR CONSOLE (SMMC)	*	D23	DP9	DAT
TEST EQUIPMENT CONSOLE (TEC)		NOT AVAILABLE	DP7	DAT
ALSF	10/01/69	E4	EP5	ENV
ARBCN	12/01/73	E1	EP1F	ENV
CRITICAL POWER SYSTEMS, ARTCC	05/07/80	E1	EP2	ENV
LDIN	01/01/72	E1	EP1C	ENV
MALS	01/01/72	E3	EP5 AND EP6	ENV
MALSR MULTI-ELECTRIC FA-9425/1	01/01/72	E3	EP6	ENV
ODALS OMNI-DIRECTIONAL APP. LIGHT SYSTEM	*	E1 and E3 or E4	EP4	ENV
PAPI	*	E5	EP1B	ENV
POWER CONDITIONING SYSTEM	*	E1	EP3	ENV
RAIL	01/01/72	E3	EP5	ENV
REIL	10/01/69	E3	EP1C	ENV
SALS	01/01/72	E4	EP5	ENV
UPS (EXIDE)	*	E8	EP7	ENV
VASI	10/01/69	E5	EP1B	ENV
DME, BUTLER, MODEL 1020	*	N19	NP92	NAV
DME, CARDION, FA-8974	05/07/80	N12, N39, AND N26	NP75	NAV
DME, CARDION, FA-9639	05/07/80	N12, N39, AND N31	NP74	NAV
DME, CARDION, FA-9783	05/07/80	N12, N39, AND N36	NP40	NAV
DME, (TT)	10/01/69	N2, OR N8 OR N39	NP19	NAV
DME, WILCOX MODEL 596B	*	N19	NP93	NAV
ILS, AIL, MARK-1B	09/01/74	N12, N13, AND N16	NP67 THRU 70	NAV
ILS, AIL, TYPE 55	12/01/73	N12, N13, AND N16	NP42 THRU 44	NAV
ILS, GS, CAPTURE EFFECT (SOLID STATE)	*	N12, N13, AND N20	NP56 OR NP73, NP65	NAV
ILS, GS, CAPTURE EFFECT (TUBE TYPE)	10/30/66	N12, N13, N14, AND N20	NP73	NAV
ILS, GS, CAPTURE EFFECT (AN/GRN27)	*	N12,N13, AND PVE44712	NP61	NAV
ILS, GS, CAPTURE EFFECT WILCOX CAT III TYPE FA-9760		NOT AVAILABLE	NP85	NAV
ILS, GS, NULL REFERENCE (TUBE TYPE)	10/30/66	N12, N13, AND N14	NP71	NAV
ILS, GS, NULL REFERENCE AN/GRN 27	*	N12,N13, AND N17	NP59	NAV
ILS, GS, NULL REFERENCE WILCOX MARK 1D/1E (FA-9365)	*	N28	NP63	NAV
ILS, GS, NULL REFERENCE WILCOX MARK 1F (FA-9919)	*	N28	NP54	NAV
ILS, GS, NULL REFERENCE WILCOX CAT III TYPE FA-9760/5		NOT AVAILABLE	NP84	NAV

* Mandatory date is 1 year from the date of this order.

Figure 1. System, Subsystem, or Equipment With Available Examinations (Continued)

SYSTEM/SUBSYSTEM/EQUIPMENT	MANDATORY DATE	CONCEPT EXAMINATIONS	PERFORMANCE EXAMINATIONS	AREA
ILS, GS, SIDEBAND REFERENCE (TUBE TYPE)	10/30/66	N12, N13, AND N33	NP72	NAV
ILS, LOCALIZER, AN/GRN27	10/30/66	N12, N13, AND N17	NP58	NAV
ILS, LOCALIZER, ALFORD LOOP	10/30/66	N12, N13, AND N14	NP89	NAV
ILS, LOCALIZER, TRAVELLING WAVE	10/30/66	N12, N13, AND N17	NP90	NAV
ILS, LOCALIZER, WILCOX CAT III TYPE FA-9759		NOT AVAILABLE	NP82	NAV
ILS, LOCALIZER, V-RING	12/01/70	N12, N13, AND N14	NP89	NAV
ILS, LOCALIZER, WAVE GUIDE	10/30/66	N12, N13, N14, AND N3-W	NP91	NAV
ILS, WILCOX, MARK 1A	09/01/74	N12, N13, AND N15	NP45 THRU 47	NAV
ILS, WILCOX, MARK 1C	05/01/75	N12, N13, N15	NP48 THRU 52	NAV
ILS, WILCOX, MARK 1D LOCALIZER	05/07/80	N12, N13, AND N27	NP62	NAV
ILS, WILCOX, MARK 1E/F LOCALIZER	*	N12, N13, AND N27	NP53 OR NP62	NAV
ILS, WILCOX, MARK 1D MARKER BEACON	05/07/80	N12, N13, AND N29	NP30, NP57, OR NP66	NAV
ILS, WILCOX, MARK 1E/F MARKER BEACON	*	N12, N13, AND N29	NP30, NP57, OR NP66	NAV
ILS, WILCOX, MARK 1D NULL REF. GS	05/07/80	N12, N13, N14	NP63	NAV
ILS, WILCOX, MARK 1E/F NULL REF. GS	*	N12, N13, N14	NP63 OR NP54	NAV
ILS, WILCOX, CAT III MKR FA-9761	*	N12, N13, AND N29	NP83	NAV
MARKERS (AN/GRN27)	10/30/66	N4	NP60	NAV
MARKERS (TUBE TYPE)	10/30/66	N4	NP9	NAV
MARKERS SOLID STATE	*	N4 OR N29	NP30 OR NP47 OR NP51 OR NP70	NAV
NDB-COMLO	10/30/66	N4 OR C1	NP8	NAV
NDB NAUTEL NX 8000BD-02001		NOT AVAILABLE	NP94	NAV
NDB SCIENTIFIC RADIO (FA-9589/9591)		NOT AVAILABLE	NP95	NAV
REMOTE RADIO CONTROLLED VISUAL NAVAIDS		NOT AVAILABLE	NP32	NAV
TACAN, ANTENNA SPEED CONTROL, AM-1720	10/30/66	N2 OR N39	NP11B	NAV
TACAN, ANTENNA GROUP, RTA-2	10/30/66	N2 OR N39	NP80	NAV
TACAN, ANTENNA SPEED CONTROL, C-2634	10/30/66	N2 OR N39	NP11C	NAV
TACAN, ANTENNA SPEED CONTROL, FA-6247/6238	10/30/66	N2 OR N39	NP80	NAV
TACAN, GRN-9A/B/C	10/30/66	N2 OR N39	NP15	NAV
TACAN, RTA-RTB-2	10/30/66	N2 OR N39	NP12	NAV
TACAN, RTC-1	10/30/66	N2 OR N39	NP13	NAV
TACAN, RTC-2	10/30/66	N2 OR N39	NP14	NAV
TACAN, RTC-3	05/01/74	N2 OR N39	NP23	NAV
VOR, CARDION (SS) FA-9467	05/07/80	N12 AND N34	NP35	NAV
VOR, DOPPLER, 2ND GEN FA-9996	*	N12, N39, AND N40	NP41	NAV
VOR, DOPPLER TUBE TYPE	10/30/66	N12 AND N1-D	NP3	NAV
VOR, TUBE TYPE	10/30/66	N12 AND N11	NP1	NAV
VOR, WILCOX MODEL 476B		NOT AVAILABLE	NP86	NAV
VOR, WILCOX MODEL 585B		NOT AVAILABLE	NP87	NAV
VORTAC, 2ND GEN BCPS FA-9996/1	*	N12, N39, AND N35	NP76	NAV
VORTAC, 2ND GEN FCPU FA-9996/2	*	N12, N39, AND N35	NP77	NAV
VORTAC, 2ND GEN RMCF FA-9996/7	*	N12, N39, AND N35	NP78	NAV
VORTAC, 2ND GEN VORTAC DME/TACAN FA-9996/3	*	N12, N39, AND N35	NP79	NAV
VOT	10/30/66	N12 PLUS N10 OR N11	NP2	NAV
AN/GPN-21/ASR-8 TRANSMITTER SITE	*	R32	RP55	RAD
ARSR-1/2,/60,/FPS-20 (SSR/DMTI)		NOT AVAILABLE	RP93	RAD
ARSR-1/2 (INDICATOR SITE)	10/30/66	R10	RP24	RAD
ARSR-1/2 (T/R SITE)	10/30/66	R10, R11, AND R29	RP3	RAD
ARSR-3 (T/R SITE)	*	R10, R11, AND R41	RP94	RAD
ARSR-3 INDICATOR SITE	*	R10	RP24	RAD

* MANDATORY DATE IS ONE YEAR FROM THE DATE OF THIS ORDER

Figure 1. System, Subsystem, or Equipment With Available Examinations (Continued)

SYSTEM/SUBSYSTEM/EQUIPMENT	MANDATORY DATE	CONCEPT EXAMINATIONS	PERFORMANCE EXAMINATIONS	AREA
ARSR-60/60M	*		RP86	RAD
ARTS-II	*	NOT AVAILABLE	RP51	RAD
ARTS-IIA TYPE FA-9020	*		RP90	RAD
ARTS-III		NOT AVAILABLE	RP39	RAD
ARTS-IIIA		NOT AVAILABLE	RP91	RAD
ASDE-2	10/30/66	R10, R11	RP4	RAD
ASR-4 (TRANSMITTER SITE)	10/30/66	R10, R11 AND R19	RP65	RAD
ASR-5D,E/6D,E (TRANSMITTER SITE)	10/30/66	R10, R11, AND R25	RP66	RAD
ASR-4 DISPLAY SYSTEM FA-4800	*		RP67	RAD
ASR-7/7E/7F (RADAR SITE)	09/01/74	R10, R11, AND R13	RP35	RAD
ASR-8	05/07/80	R10, R11, AND R32	RP48	RAD
ASR-9 SYSTEMS		NOT AVAILABLE	RP95	RAD
ASRDS DISPLAY SYSTEM FA-7300		NOT AVAILABLE	RP68	RAD
ASRDS-2 DISPLAY SYSTEM FA-7700		NOT AVAILABLE	RP69	RAD
ASRDS-3 DISPLAY SYSTEM FA-8150		NOT AVAILABLE	RP70	RAD
ATCBI (DIGITAL DEFRUITER)	06/01/78	R10 AND R27	RP5A OR RP33	RAD
ATCBI-2 (INDICATOR SITE)	10/30/66	R10, R11, PLUS R1-B OR R7	RP78	RAD
ATCBI-3 (INDICATOR SITE)	10/30/66	R10, R11, PLUS R1-B OR R7	RP79	RAD
ATCBI-3 (RADAR SITE)	10/30/66	R10, R11, AND R1-B OR R40	RP5A	RAD
ATCBI-4 FA-8470	09/01/74	R10, R11, AND R15	RP33	RAD
ATCBI-5 FA-9400	11/01/78	R10, R11, AND R31	RP53	RAD
BANS (BRITE NUMERICS SUBSYSTEM)		NOT AVAILABLE	RP50	RAD
BRITE-1	01/01/72	R10 AND R9	RP63 AND RP64	RAD
BRITE-2/4	09/01/74	R10 AND R33	RP59 AND RP60	RAD
BRITE-4 PPI/TV CAMERA		NOT AVAILABLE	RP61	RAD
BRITE-4 TV DISPLAY	06/01/76	R21	RP62	RAD
CD COMMON DIGITIZER-2A/B/C/D		NOT AVAILABLE	RP96	RAD
CD, FYQ-47/49	05/01/75	NOT AVAILABLE	RP40	RAD
CD, HEIGHT ONLY	06/15/78	R26	RP40	RAD
DBRITE-DIGITAL BRITE		NOT AVAILABLE	RP97	RAD
EARTS		NOT AVAILABLE	RP56	RAD
FPS-20/91	10/30/66	R10 AND R11	RP87	RAD
FPS-65A	05/01/73	R10 AND R11	RP31	RAD
FPS-66/67	10/30/66	R10 AND R11	RP32	RAD
FPS-90/FPS-6/FPS-116	05/01/75	R10 AND R11	RP41A	RAD
PAR PRECISION APPROACH RADAR (GPN-22)			NOT AVAILABLE	RP85RAD
RBDE-4	10/30/66	R6 OR R10 PLUS R1-D	RP13	RAD
RBDE-5/5A & 6 HORIZONTAL DISPLAY	10/30/66	R6 OR R10 PLUS R1-D	RP14	RAD
RCL AREA CONTROL		NOT AVAILABLE	RP92	RAD
RCL REPEATER		NOT AVAILABLE	RP58	RAD
RML-5 ARTCC TERMINAL	05/01/75	R10 AND R19	RP88	RAD
RML-5 REPEATER SITE	N/A	R24	RP89	RAD
RMLT-5 RADAR SITE	05/01/75	R10 AND R19	RP37	RAD
RMLI-6 INDICATOR SITE	09/01/74	R10 AND R16	RP84	RAD
RMLR-6 REPEATER SITE	N/A	R24	RP83	RAD
RMLT-6 RADAR SITE	05/01/75	R10 AND R16	RP82	RAD
RMLT-1A/2/3/4 RAD/IND SITES	10/30/66	(R10 AND R12) OR R35	RP80 OR RP81	RAD

* Mandatory date is 1 year from the date of this order.

Figure 1. System, Subsystem, or Equipment With Available Examinations (Continued)

SYSTEM/SUBSYSTEM/EQUIPMENT	MANDATORY DATE	CONCEPT EXAMINATIONS	PERFORMANCE EXAMINATIONS	AREA
TML-3 MICROWAVE TRANSMITTER FA-9797			NOT AVAILABLE	RP71RAD
TML-3 MICROWAVE RECEIVER FA-9798		NOT AVAILABLE	RP72	RAD
TML TCM-6 TRANSMITTER		NOT AVAILABLE	RP76	RAD
TML TCM-6 RECEIVER		NOT AVAILABLE	RP77	RAD
UPX-14	10/30/66	R10, R11, AND R1-B	RP6	RAD
UPX-6/UPX-9B	10/30/66	R10, R11, AND R1-B	RP7	RAD
VIDEO MAPPER GROUP AN/GPS-131(V)		NOT AVAILABLE	RP73	RAD
VIDEO MAPPER GROUP FA-8049		NOT AVAILABLE	RP74	RAD
VIDEO MAPPER, FIVE CHANNEL FA-8970		NOT AVAILABLE	RP75	RAD
MARKER-TUBE TYPE		NFN8	NFNP9	NF
MARKER-WILCOX		NFN8	NFNP18	NF
MLS-MICROWAVE LANDING SYSTEM		NFN16 OR NFN17	NFNP16	NF
NDB NON-DIRECTIONAL BEACON (NDB-MHW)			NFN8	NFNP8NF
NDB NON-DIRECTIONAL BEACON-SOLID STATE			USE FAA EXAM	NFNP10NF
SDF/LOC WILCOX SDF/LOC TYPE 1260/1261			NFN13	NFNP17NF
VOR WILCOX MODEL 476A/B		NFN3	NFNP3	NF
VOR WILCOX 482		USE FAA EXAM	NFNP6	NF
VOR E-SYSTEMS		NFN14	NFNP14	NF
VOR EDO MODEL 780		NFN12	NFNP12	NF

Figure 2. Listing of Services Requiring Personnel Certification

SERVICES	DESCRIPTION
BDAT	BEACON DATA (DIGITIZED)
BUECS	BACKUP EMERGENCY COMMUNICATION SERVICE
CFAD	COMPOSITE FLIGHT DATA PROCESSING
CFCS	CENTRAL FLOW CONTROL SERVICE
CRAD	COMPOSITE RADAR DATA PROCESSING
DRAD	DARC RADAR DATA PROCESSING
ECOM	EN ROUTE COMMUNICATIONS
ERAD	EN ROUTE RADAR (BROADBAND)
ERDP	EN ROUTE RADAR DATA PROCESS, EARTS
ESEC	ENROUTE SECONDARY RADAR BEACON (BROADBAND)
ETARS	ENROUTE TERMINAL AUTOMATED RADAR SERVICE
FDAT	FLIGHT DATA ENTRY AND PRINTOUT SERVICE
FSSAS	FLIGHT SERVICE STATION AUTOMATED SERVICE
IDAT	INTERFACILITY DATA SERVICE
ILS	INSTRUMENT LANDING SYSTEM
NAMS	NADIN MESSAGE PROCESSING SERVICE
NDAT	NADIN DATA INTERCHANGE SERVICE
PCSS	POWER CONDITIONING SYSTEM SERVICE (ARTCC, CERAP, AND ARTS FACILITIES)
RDAT	RADAR DATA (DIGITIZED)
RTADS	REMOTE TOWER ALPHANUMERIC DISPLAY SERVICE
RTRDS	REMOTE TOWER RADAR DISPLAY SERVICE
TARS	TERMINAL AUTOMATED RADAR SERVICE
TCOM	TERMINAL COMMUNICATIONS
TRAD	TERMINAL RADAR
TRDP	TERMINAL RADAR DATA PROCESSING, ARTS II/III
TSEC	TERMINAL SECONDARY RADAR
WANS	AVIATION WEATHER AND NOTAM SYSTEM
WMSCS	WEATHER MESSAGE SWITCHING CENTER SERVICE

APPENDIX 6. NON-FEDERAL VERIFICATION REQUIREMENTS

This appendix lists the verification examinations associated with the non-Federal program in the following tables:

1. **Figure 1. Verification Examinations for Non-Federal Facilities.**

2. **Figure 2. Previous Verification Examinations for Non-Federal Facilities.**

APPENDIX 6. NON-FEDERAL VERIFICATION REQUIREMENTS (CONTINUED)

Figure 1. Verification Examinations for Non-Federal Facilities

FACILITY TYPE	MANUFACTURER	MODEL OR EQUIPMENT TYPE	CONCEPTS	PERFORMANCE EXAMINATIONS
DME	"E " SYSTEMS		NFN-15	NFNP-15
DME	BUTLER	1020	NFN-11	NFNP-15
DME	WILCOX	595/596	NFN-11	NFNP-15
ILS	AIL	55	USE FAA EXAM	USE FAA EXAM
ILS	WILCOX	MARK 1B	USE FAA EXAM	USE FAA EXAM
LFM	KINN ELECTRONIC CORP.	FA-5791, KEC-6072	NFN-8	NFNP-9
LFM	WILCOX	492B	NFN-8	NFNP-9
MARKER	VARIOUS MANUFACTURERS	TUBE TYPE	USE FAA EXAM	NFNP-9
MLS	HAZELTINE	2500-N	NFN-16	NFNP-16
MLS	VARIOUS MANUFACTURERS	MLS SYSTEM CONCEPTS EXAMINATION	NFN-17	N/A
NDB-MHW	AEROCOM, INC.	25XLA, 50HXS/3, MH-50, 100XLA	NFN-8	NFNP-8
NDB-MHW	AERONAUTICAL COMM EQUIP. CO.	50HXS, 50SLA, 50XLG	NFN-8	NFNP-8
NDB-MHW	AIR ASSOCIATES, INC.	TMO	NFN-8	NFNP-8
NDB-MHW	CONTINENTAL RADIO	250M	NFN-8	NFNP-8
NDB-MHW	FRAN AIR PRODUCTS	MH50	NFN-8	NFNP-8
NDB-MHW	HAZELTINE CORP.	TMO	NFN-8	NFNP-8
NDB-MHW	NATIONAL	TMS-1, TUS-1	NFN-8	NFNP-8
NDB-MHW	NORTHERN RADIO	N528E	NFN-8	NFNP-8
NDN-MHW	SOUTHERN AVIONICS	H50, 50HA, SAC50, AM25, H25, H25-A	NFN-8	NFNP-8
NDB-MHW	SOUTHERN AVIONICS	SS250	NFN-10	NFNP-10
NDB-MHW	SPARTAN CO.	CTRX25	NFN-8	NFNP-8
NDB-MHW	TECHNICAL DEVICES CORP.	BC-329N	NFN-8	NFNP-8
NDB-MHW	TRANS TEXAS AIRWAYS	TYPE 25	NFN-8	NFNP-8
NDB-MHW	WILCOX	785D	NFN-10	NFNP-10
SDF/LOC	WILCOX	1260/1261 MARKER	NFN-13	NFNP-17 & 18
VOR	"E" SYSTEMS		NFN-14	NFNP-14
VOR	EDOAIRE	780	NFN-12	NFNP-12
VOR	FAA/MEMCO	TUBE TYPE	USE FAA EXAM	USE FAA EXAM
VOR	WILCOX	476A/B, 585B	NFN-3	NFNP-3
VOR	WILCOX	482	USE FAA EXAM	NFNP-6

APPENDIX 6. NON-FEDERAL VERIFICATION REQUIREMENTS (CONTINUED)

Figure 2. Previous Verification Examinations for Non-Federal Facilities

EXAM NUMBER	EXAM TYPE	EXAMINATION TILE	REMARKS
NFN-1	CONCEPTS	WILCOX 412 ILS	
NFN-2	CONCEPTS	AIL TYPE 55 ILS	USE FAA EXAMINATIONS
NFN-4	CONCEPTS	COLLINS 101 VOR	
NFN-5	CONCEPTS	FAA/MEMCO VOR, TUBE-TYPE	
NFN-6	CONCEPTS	WILCOX 482 SOLID STATE VOR	
NFN-9	CONCEPTS	WILCOX MARK 1B ILS	USE FAA EXAMINATIONS
NFNP-1	PERFORM.	ILS WILCOX 412 AND MARK 1B	USE FAA EXAMINATIONS
NFNP-2	PERFORM.	AIL TYPE 55 ILS	USE FAA EXAMINATIONS
NFNP-4	PERFORM.	COLLINS 101 VOR	
NFNP-5	PERFORM.	FAA/MEMCO TUBE-TYPE VOR	
NFNP-13	PERFORM.	WILCOX 1260/1261 SDF/MARKER	SPLIT INTO NFNP 17 AND NFNP 18

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